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ABSTRACT

This annotated bibliography includes about 170 citations of dissertations, articles, papers, and other studies concerning the development of writing skills in non-native English-speakers. The works cited are based on the collection and analysis of data, and do not include articles describing or prescribing pedagogical approaches or curricula. Similarly, pieces written primarily for the purpose of constructing evaluative measures are not included. Entries are presented in five sections that focus on the following: (1) text features (error analysis of syntax and mechanics, discourse features); (2) non-native writing proficiency development (bilingual emergent literacy, later elementary and secondary development, literate adults); (3) the writing process (relationship to attitude, revision, and effect of task and other contextual variables); (4) non-native writing and other language skills (reading/writing relationship, speaking/writing relationship, relationship to native language writing ability); and (5) instructional factors (curriculum and program design, teacher response to student writing). An author index is included. (MSE)

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CENTER FOR THE STUDY OF WRITING

Technical Report No. 51

ANNOTATED BIBLIOGRAPHY OF RESEARCH ON WRITING IN A NON-NATIVE LANGUAGE

Sandra R. Schecter
Linda A. Harklau

September, 1991

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Preface

The Clearinghouse for Bilingual Education estimates the number of Americans who do not speak English as a native language at around 35 million, with projections of close to 40 million by the year 2000. The most recent statistics (1987) from the U.S. General Accounting Office place the number of limited-English-proficient students in the public schools at more than 1.5 million. In his report on *The Condition of Bilingual Education in the Nation: 1988*, former Secretary of Education William J. Bennett concluded from consistent demographic trends that "the country may continue to experience an increase in limited-English-proficient students in all grade levels in the foreseeable future" (p. 1-2).

What does the research tell us about these students and their instruction? While we know a great deal about the teaching and learning of oral language, we know far less about the teaching and learning of literate behaviors which these students will need to demonstrate in order to succeed at every level of formal schooling. Until recently, this gap in our knowledge has been most dramatic in the area of writing—with literacy tending to be construed as reading—although we are now seeing a rapid growth in the existing body of research on the nature of L2 writing.

It seemed to us in initiating this bibliography that, perhaps because the field is relatively recent, it is not especially cohesive. Research studies tend to be disparate, rather than building clearly from an established research agenda, or following upon one another in a recognizable sequence. We therefore had two main purposes in undertaking this project. First, we wished to establish a database that researchers and practitioners could use and manipulate according to their professional interests and the special needs of their students. But more importantly, by bringing the literature together in one place, we hoped to get a clearer picture of what exactly has been empirically documented about writing in a non-native language at present, and the sorts of theories and thinking that have guided our inquiry thus far. In doing so, we hope to create a synthesis of the research which will contribute towards building a definable field of inquiry, and a coherent research agenda for the 90s.

In establishing our corpus, we sought data-based pieces; that is, pieces in which data were collected and analyzed. Thus, articles describing (or prescribing) pedagogical approaches or curriculum were not included in this collection. Nor were those devoted exclusively to advocating a particular political or philosophical stance. That is not to say that these pieces have not been important to the field. Some clearly have been influential in shaping the paths of inquiry that the field has taken. The problem with these pieces, as we see it, is that they frequently take on a life of their own, in that the musings of scholars appearing in print become instantiated as truths in subsequent discussions.

We also decided to exclude pieces written primarily for the purpose of constructing evaluative measures. While acknowledging that there is a strong interest and large body of literature in this field around assessment issues, we felt that the development of measurement tools is essentially a separate issue from the one we wished to pursue. Finally, for reasons of manageability and focus, we made the decision to exclude studies dealing exclusively with non-standard dialects. While acknowledging that the distinction between language and dialect is largely a political one and therefore easily challenged, we nevertheless chose not to include pieces where the issues were framed in terms of non-standard varieties because review of this work would have required many more resources than we had at our disposal. Work in the area of literacy and non-standard dialects is premised on a set of assumptions arising primarily from sociolinguists' interest in the interface of language, community identity, and social space, while the research on writing

in a non-native language tends to take a more circumscribed view of social context, limiting these considerations to task and other classroom variables.

In compiling pieces for review, we utilized four sources: *Linguistics and Language Behavior Abstracts*, ERIC, *Dissertation Abstracts International*, and bibliographies of pieces reviewed. Where the same research was reported both in a master's thesis or doctoral dissertation and in a subsequently published article, to avoid redundance we included only the more recent published piece in the final edited version. Where the same research was discussed in both a conference presentation and a published work, we retained only the published work for the bibliography. At present, we have over 170 entries recorded and abstracted on a Notebook II database, plus supporting materials such as measurement instruments used by second language writing researchers. For each entry, the database includes keywords for: age level of writer(s); native language of writer(s); target language; research methodology; genre of the writing studied; and the context in which writing was produced.

We developed the categories inductively while reviewing and sorting bibliography entries. While a number of entries could arguably be placed in different categories (especially in those cases where the researcher's agenda was broad), our judgment calls were based on the study's most salient findings.

Finally, we regret if we have inadvertently neglected to include a colleague's work in this bibliography, or omitted recent presentations and publications which had not yet appeared in our searches when the bibliography was being compiled. We hope to be able to rectify such omissions through regular updatings. Our next step, however, will be to outline the historical development of the field of non-native writing research, identify past and present research trends and the theoretical assumptions underlying them, and synthesize major research findings culled from the database. By this process we intend to conceptualize a research agenda that frames the issues that we choose to identify as significant in terms of both their theoretical generativity and the practical and humane imperatives of their undertaking.

ANNOTATED BIBLIOGRAPHY OF RESEARCH ON WRITING IN A NON-NATIVE LANGUAGE

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1.0 TEXT FEATURES

1.1 Error analyses of syntax and mechanics

References included in this section focus on errors contained in the texts of non-native writers. Most studies document grammatical, morphological, lexical, and mechanical errors found in texts at or below sentence level. In many cases, the source of errors is sought, or errors in non-native writers' texts are compared to those of native writers.

Aguas, E. F. (1964). *English composition error of Tagalog speakers and implications for analytical theory* (Doctoral dissertation, University of California, 1964).

Documents errors of Tagalog L1 speakers writing in English L2. The compositions of 300 native speakers of Tagalog ranging from second grade to high school were selected for analysis. Errors in the compositions were tallied and ten judges were asked to make corrections. Errors were classified into preposition, article, verb, usage, word sequence, connections, noun, pronoun, modifier, verbal, transformation, sentence type, spelling, and miscellaneous categories. It was found that half of the 284 errors tabulated were in the use of verbs, particularly in the omission of past tense markers. Errors in preposition usage were the next most frequent, followed by article usage and noun usage. The author asserts that errors have two main sources, transfer from Tagalog to English, and false analogy between one aspect of English grammar and another non-comparable one. He notes that grammatical but not lexical transfer can be predicted by contrastive analysis. Some error types such as failure to mark nouns for plural number were found to be more persistent across grade levels than others. Evidence of avoidance of some syntactic structures was found.

Bardovi-Harlig, K., & Bofman, T. (1989). Attainment of syntactic and morphological accuracy by advanced language learners. *Studies in Second Language Acquisition, 11*(1), 17-34.

Examines the relationship between syntactic complexity and overall accuracy in written English of advanced L2 learners. Compositions written by 30 students as part of a university placement exam for incoming international students were selected for analysis. Students scored between 543-567 on the TOEFL. Learners were divided into those who passed the entire university placement exam—consisting of a composition, a listening comprehension test, and structure, vocabulary, and reading tests—and those who did not pass. Students were then put in pass/non-pass matched pairs by L1 and TOEFL score. Compositions were evaluated for syntactic complexity (as measured by clauses per T-unit) and errors. Pass and non-pass groups performed similarly on number of clauses per T-unit. Complex T-units, containing two or more clauses, were produced with the same frequency across language groups. While the pass and non-pass groups showed a similar distribution of error types, the pass group made fewer errors per clause. Both groups made the most errors in morphology, less in lexical-idiomatic language, and fewest in syntax. This pattern did not vary by language background. While the incidence of syntactic errors was not significantly

different between the pass and non-pass groups, non-pass subjects made significantly more lexical-idiomatic errors than pass group counterparts. In sum, the authors assert that advanced non-native written English is characterized by strong syntactic skills and relatively weak control over grammatical morphemes. They offer two explanations for this phenomenon: one, the "communicative" interpretation, arguing that morphological errors are learned later because they generally are local errors which do not inhibit communication, and the other, a "formal" interpretation, arguing that learners are predisposed to attend to syntax before morphology.

Barnwell, D. (1987). *Syntactic and morphological errors of English speakers on the Spanish past tenses.* (ERIC Document Reproduction Service No. ED 281 369).

Describes verb usage errors of English L1 speakers writing in Spanish L2. An error analysis of a midterm taken by 85 students enrolled in a second-semester Spanish course was conducted to document errors in verb usage. Data were taken from a prose passage in which students were asked to supply the correct version of 17 verbs. It was found that students tended to make errors in treating verbs as irregular if they resembled another verb that is irregular, or if the verb is of a stem-changing type. Also, first person forms were often overgeneralized. The author suggests that this is a result of first person forms appearing most frequently in the classroom.

Bhatia, A. T. (1974). An error analysis of students' compositions. *International Review of Applied Linguistics, 12*(4), 337-350.

Reports errors made in the compositions of ten students enrolled in an Indian university. Verb tense and sequence, and article usage, were found to be the largest areas of grammatical error. These were followed in frequency by subject-verb agreement, prepositional, and modifier or quantifier errors. Errors with pronominal forms were infrequent. At the organizational level, the author found the compositions to be especially lacking in originality and adequate development.

Chappel, V. A., & Rodby, J. (1982). *Verb tense and ESL composition: A discourse level approach.* Paper presented at the Annual Convention of Teachers of English to Speakers of Other Languages, Honolulu, HI. (ERIC Document Reproduction Service No. ED 219 964).

Traces sources of verb usage errors in L2 compositions. Conferences with four ESL writers on errors in verb tense usage were analyzed. About a third of the errors were found to be attributable to students' forgetting linguistic knowledge with which they were familiar. These errors were readily corrected when pointed out. Approximately 40% of the errors were found to be caused by students knowing the appropriate tense but not knowing the appropriate verb form representing it. A quarter of the errors were actually found to be mischosen tense. These errors tended to occur in discourse contexts which require shifts in tense usage. The authors also investigated the use of tense and adverbials in the writing of native-English speaking graduate students based on Chafe's analysis, and native readers' judgments of clarity. It was found that adverbial usage contributed to the interpretability of tense forms.

Chastain, K. (1980). An inventory of student composition errors: End of fourth semester. *Canadian Modern Language Review, 36*(4), 637-643.

Documents composition errors of English L1 Spanish L2 writers. Forty-five compositions of second-year Spanish L2 students representing a range of skill were selected for analysis. Using Stockwell, Bowen, and Martin's analytical scheme,

twenty-one aspects of the compositions were tallied, including: number of words; total number of errors; number of sentences; number of noun phrase and verb phrase errors in terms of degree of sentence complexity (basic sentence pattern, simple sentence transformation, complex sentence transformation); and word, syntactic order, and form (suffix) errors. Subjects were found to use complex sentences most frequently. The author speculates that this is the product of instructional emphasis. Errors were more frequent in these sentences. Basic sentences were second most frequent. There were more NP than VP errors. Subjects made few word order errors. Errors of word choice, omission, or extra word were more common than word form errors.

Cronnell, B. (1985). Language influences in the English writing of third- and sixth-grade Mexican-American students. *Journal of Educational Research, 78*(3), 168-173.

Interprets text errors in terms of influence from Spanish, Chicano English, and interlanguage. Writing samples of third-graders (n=78) and sixth-graders (n=92) collected at a school in the Los Angeles area as part of a year-end assessment were subjected to an error analysis. The sample texts were produced by students identified as Hispanic by their teachers. 27% of errors made by the third-grade cohort, and 36% of the errors made by the sixth-grade cohort were considered to have possible language influences from Spanish, Chicano English, or interlanguage. Third-graders made more errors in Spanish-influenced spelling of English words, and in the influence of Spanish pronunciation in written English, while sixth-graders made more errors in syntax and misuse of English vocabulary. Relative presence or absence of errors was not found to be highly correlated with the overall quality of the writing samples. In addition, since data were not collected on the home language, country of birth, or length of residence in the U.S. of subjects, errors could not be definitely attributed to influence from Spanish, interlanguage, or Chicano English.

Fein, D. M. (1980). *A comparison of English and ESL compositions*. Unpublished master's thesis, University of California, Los Angeles.

Compares texts produced by L1 and L2 writers in terms of error, syntactic structure, and overall quality. The compositions of two groups of students enrolled in freshman composition (n=37) and ESL freshman composition (n=42) writing on the same topic were compared. ESL compositions were given significantly poorer holistic ratings and had 70% more errors than those written by students in regular freshman composition. ESL students wrote approximately the same amount, and used slightly longer T-units. Writers in the ESL class tended to make errors in verb, article, and preposition usage and subject-verb agreement, while writers in the regular class made errors in mechanics, reference, sentence fragments and usage. The author asserts that ESL students' errors are more grammatically-based while the other group's were primarily at the discourse level. Analysis of content, organization, and style on selected essays showed that highly-rated compositions from both groups were similar. Poorly-rated ESL compositions appeared to be slightly stronger in organization and content than regular English counterparts. Overall, however, these differences were overshadowed by the number of errors made and differential holistic scores.

Granfors, T., & Palmberg, R. (1976). *Errors made by Finns and Swedish-speaking Finns learning English at a commercial-college level.* (ERIC Document Reproduction Service No. ED 122 628).

Hypothesizes that Swedish L1 learners of English have an initial advantage over Finnish L1 learners because the article, prepositional, word order, and spelling systems of Swedish are more similar to English. Finnish L1 writers were hypothesized to

perform better on subject-verb agreement. Forty-two Swedish-speaking and 58 Finnish-speaking students participated in a study to test these hypotheses. Both groups heard a short story based on a comic strip in their respective L1s. They were then given the pictures (but not text) of the story and asked to relate the story in English. It was found that Finnish speakers tended to omit articles. A relationship between percentage of articles omitted and proficiency level could be established for Finnish but not for Swedish speakers. Finns also tended to omit prepositions more than Swedes. Contrary to predictions, Finnish speakers performed more poorly on subject-verb agreement than Swedish speakers. Swedish speakers made more spelling errors which were consistent with English pronunciation while Finnish errors showed more L1 phonemic influence. A timed translation task with the same subjects confirmed these findings.

Holtzknecht, S., & Smithies, M. (1980). *The errors in written English made by students at the Papua New Guinea University of Technology* (Final Report). (ERIC Document Reproduction Service No. ED 201 201).

Conducts an error analysis on texts of 451 Pacific Islander students writing in English. Article misuse proved to be the most frequent error. Prepositional errors were also frequent. Errors in verb choice, especially wrong tense, were the third most frequent, with errors in noun usage and spelling errors based on non-standard pronunciation following. Errors in redundancy were next, with word choice, spelling, and punctuation errors the least frequent. The authors suggest that the influence of students' pronunciation of English on spelling and lack of proofreading or carelessness cause the majority of errors.

Laing, D., & van den Hoven, A. (1986). *A comparative study of the syntactic maturity and surface control of grade-eight Francophones writing in English.* Paper presented at the International Conference on the Teaching of English, Ottawa, Ontario, Canada. (ERIC Document Reproduction Service No. ED 285 409).

Compares texts of Anglophone and Francophone students writing in English. English narrative (n=29) and argumentative (n=32) writing samples of Francophone Canadian eighth-grade children being educated in French were compared against English narrative (n=32) and argumentative (n=33) writing samples of Anglophone English-schooled students. Samples were the result of two 45-minute drafting sessions. Significant difference was found between the groups on measures of syntactic complexity including words per T-unit, words per clause, and clauses per T-unit. An error analysis revealed that Francophones made more verb usage errors than Anglophone writers on the argumentative task but not on the narrative task. Errors of Francophone students writing in English also differed in kind from those of the Anglophone students. Francophone students made significantly more pronoun errors, but only in the narrative mode. They also made significantly more spelling errors, some of which showed the influence of French L1. However, the authors note that individual performance within groups varied greatly, and may have skewed aggregate results, particularly in the Francophone group.

Li, L. (1989). *Les erreurs des étudiants chinois dans l'apprentissage du français* [The errors of Chinese students in learning French]. (ERIC Document Reproduction Service No. ED 310 617).

Documents errors in the written and spoken French L2 production of Chinese (PRC) students. Forty-eight compositions and 33 oral reports produced by nine first- through third-semester French majors were analyzed. Article errors were found to be most

frequent, comprising 18.8% of the total. These were followed by word choice errors, verb errors, and syntax errors. Errors made in these four categories made up 2/3 of the errors found. The author notes that in the Chinese instructional system, error frequency is an important criterion for grading, and teachers spend a great deal of time trying to eradicate them. However, the source of error is frequently neglected. The author uses Corder's distinction between competence and performance errors to suggest that these errors are caused by a lack of competence or mastery of language rules. The author also notes that Chinese students study English for six years in secondary school, which both helps and causes interference in their French production. A contrastive analysis of Chinese and French is employed to explain the source of errors.

LoCoco, V. G. (1975). An analysis of Spanish and German learners' errors. *Working Papers on Bilingualism: No. 7.* (ERIC Document Reproduction Service No. ED 125 266).

Compares errors made by English L1 writers writing in Spanish L2 (n=142) and German L2 (n=146). Samples were collected over a four month period. Subjects selected their own topics. Errors were classified according to their source (native and/or target language influence). Error type and frequency were found to change over time, and were different for German and Spanish L2 learners. Almost all intralingual errors were found to be morphological, with adjectival forms the largest problem area. Interlingual errors were more common in German due to using English word order. Translation errors in Spanish increased over time. German learners tended to make mistakes in verb forms for which English and German rules coincided, while Spanish learners made similar errors with articles. Spanish learners also tended to omit conjunctions and prepositions which are not required in English but are in Spanish. Spanish learners, possibly due to instructional influence, were more daring in attempting forms they had not been taught.

Mougeon, R., et al. (1981). *Le français et l'anglais des élèves franco-ontariens: Analyse des erreurs contenués dans un echantillon de redaction écrites par des élèves de 12eme et 13eme années* [The written French and English of Franco-Ontarian students: Analysis of errors contained in a sample of essays written by students in grades 12 and 13]. (ERIC Document Reproduction Service No. ED 208 650).

Tallies errors made by Francophone students writing in French and English. One hundred L2 English compositions and 100 L1 French compositions written by Francophone students enrolled in French-medium schools were examined. A portion of the sample contained French and English compositions written by the same students. In addition, 50 compositions written by Anglophone students in English were collected. An error analysis was done on all compositions. Nine types of errors were made with frequency by the Francophone writers writing in French. These included homophonic, stylistic, and orthographic errors, and mistakes in verb choice, punctuation, use of informal or spoken language, co-reference, and preposition choice. Four error types made frequently by the Francophone writers in English L2 writing samples were: orthographic errors, wrong preposition choice, punctuation, and co-reference errors. Francophone students were found to write more in French but to make as many errors in French (L1) as in English (L2) writing. A comparison with Anglophone students on six error types showed that Francophones made proportionally more errors.

Mukattash, L. (1981). Wh-questions in English: A problem for Arab students. *International Review of Applied Linguistics, 19*(4), 317-332.

Describes errors in the production of wh-questions by Arab-speaking students. A corpus of 4000 wh-questions produced by 400 Arab-speaking students under test conditions was examined for errors in word order and use of auxiliaries. It was found that approximately 25% of students' errors involved a failure to invert the subject and verb or auxiliary. The author notes that while this could be a sign of L1 influence, it has also been reported to be characteristic of first language learners and second language learners from other linguistic backgrounds. Students also frequently omitted *do* in questions formed from sentences in which there was not an auxiliary. Again, this result could be attributed to L1 influence or interlanguage. Students were found to use *do* or *be* incorrectly instead of other auxiliaries, which can only be attributed to interlanguage. The author concludes that error analysis is a method which cannot differentiate in many cases between possible sources of error.

Obeidat, H. A. (1986). An investigation of syntactic and semantic errors in the written composition of Arab EFL learners (Doctoral dissertation, University of Illinois, 1986). *Dissertation Abstracts International, 47*, 3415A.

Documents errors made by Arabic L1 writers of English. Compositions written by 120 Arabic L1 students majoring in English and enrolled in rhetoric classes plus 30 translated texts written by other Arabic L1 students majoring in English and attending a Jordanian university were examined using an error analysis. It was found that students made interlingual (L1 influenced) errors in determiners and preposition usage, retaining resumptive pronouns in relative clauses, word order, missing subjects and copula, and verb and preposition idioms. Students were also found to make interlingual errors in proverbs and idioms, prefabricated expressions, and forms of address. Evidence of lexical interference was also found. Intralingual (interlanguage or learner system) errors were found in relative pronoun and wh-questions, subject-verb agreement, verb forms, copula, auxiliary, tense usage, and word choice. The author asserts that some error such as copula and 3rd person singular *-s* deletion are evidence of universal grammar.

Penfield, J. (1981). *Literacy development in bilingual contexts: Mexican-Americans*. Paper presented at the Annual Meeting of the American Association for Applied Linguistics, New York. (ERIC Document Reproduction Service No. ED 212 439).

Examines errors in compositions of 15 speakers of southwestern U.S. Chicano English. The author contends that many of the errors made have been traditionally attributed to L1 interference from Spanish, when in fact they represent the phonological influence of spoken Chicano English in written orthography, and the syntactic features of Chicano English such as topicalization and double negation.

Scott, M. S., & Tucker, G. R. (1974). Error analysis and English language strategies of Arab students. *Language Learning, 24*(1), 69-97.

Compares errors made in Arabic L1 English L2 writers' texts on two occasions twelve weeks apart. An English proficiency test, self-ratings of proficiency, a language background questionnaire, and picture stimulus written and oral tasks were administered to 22 Arabic speakers enrolled in an intensive English class. An error analysis (excluding lexical errors) and T-unit analysis was done on spoken and written texts. At Time I subjects made more errors in spoken than written production but approximately the same percentage at Time II. Preposition errors were found to occur

with similar frequency in writing and speech. Verb errors occurred more frequently in speech than writing. Most of these errors were in the use of auxiliary and copula. Third person singular verbs were unmarked three times more often in speaking than writing. Errors in verb tense usage were found to be difficult to analyze. Article usage was the third most frequent type of error. Omitting definite articles, an error type attributable to L1 interference, accounted for close to one-third of errors made. Article errors were made more frequently in writing than speaking.

Stenstrom, A. (1975). *Grammatical errors in teacher trainees' written work* (Swedish-English Contrastive Studies Report No. 7). (ERIC Document Reproduction Service No. ED 145 703).

Analyzes errors in summaries written in English L2. Forty-two learners of English were asked to write and give audiotaped summaries of a book. Grammatical errors in the resulting texts were identified. Verb phrase errors were common, particularly errors in form, tense, and aspect. Errors were also common in the selection of articles and prepositions. Subjects also made errors of subject-verb agreement. The author notes the problems associated with this sort of analysis, particularly the inability to separate mistakes for which subjects know a rule but forget it and those caused by a lack of proficiency or familiarity. Also, avoidance strategies and the stimuli used in the task may have influenced error production. The author estimates that approximately 55% of the errors were caused by intralingual (L2) interference while 20% were caused by interlingual (L1) interference. An evaluation of the errors by native speakers of English showed that the majority of errors did not affect comprehensibility.

Teel, T. L. (1971). *A sociolinguistic study of Spanish linguistic interference and nonstandard grammatical phenomena in the written English of selected Mexican-American bilinguals.* Unpublished master's thesis, University of Texas, El Paso.

Analyzes errors made by bilingual writers at various age levels. Four groups of Spanish-English bilinguals, high school students (n=34), adults from the community (n=9), students from the University of Texas, El Paso (n=6), and elementary school students (n=6), completed a questionnaire on language attitudes and use, and wrote one-page compositions in Spanish and English. Most study participants were found to be from lower-class backgrounds. Non-standard language features which were prevalent in writing samples included omission of the past tense *-ed* marker on verbs, omission of plural *-s* marker on nouns, the use of *in* or *on* in appropriate contexts attributed to interference from the Spanish uses of *en*, the omission of articles or ungrammatical inclusion, incorrect use of idiomatic English time and numerical expressions, and the incorrect use of *-s* with third person singular verbs. While some of these features are attributable to Spanish L1 influence, it is suggested that they could be stable features of the community's English dialect as well.

Wilcott, P. (1973). *Definiteness problems in the written English of Arabic speakers: A taxonomy with partial explanation.* (ERIC Document Reproduction Service No. ED 121 052).

Examines article usage errors. Data consisted of 16 three-hour history exams written in L2 English. The largest group of errors consisted of those in which *the* is omitted in an obligatory context, making the noun phrase ungrammatical. The next most frequent type of error was the inclusion of *the* in contexts where no article is stylistically more appropriate. The author suggests that these errors are influenced by Arabic, in which mass nouns always take an article, and abstract nouns generally do. Plural count nouns take articles in Arabic, which the author uses to explain part of the corpus. A third, less

frequent type of error, was the lack of an article where *a/an* was appropriate. The author attributes these errors to Arabic influence as well.

1.2 Discourse features

References in this section document the organizational structure, content, stylistic features, and lexical choice in non-native writers' texts. Section 1.2.1 compares discourse features of writers from various L1 backgrounds writing in the same language. Studies in Section 1.2.2 use native L1 writers as a basis of comparison to judge the discourse features of non-native writers' texts. References in Section 1.2.3 examine manifestations of L1 linguistic and cultural background in discourse features of L2 texts.

1.2.1 Cross-cultural comparisons

Connor, U., & McCagg, P. (1983). Cross-cultural differences and perceived quality in written paraphrases of English expository prose. *Applied Linguistics*, *4*(3), 259-268.

Examines the organizational structure of paraphrases done by L1 and L2 writers of English. Eleven native writers of English, 11 Japanese L1 English L2 writers, and 11 Spanish L1 English L2 writers were asked to read an expository passage and recall it immediately after in writing. Both the original passage and students' paraphrases were analyzed using a propositional analysis based on Meyer (1975). Both groups were found to recall approximately the same number of main ideas, although native writers of English reorganized the ideas in their texts more. Japanese speakers were much less likely to include an orienting statement such as "This article discussed ..." Overall, the authors conclude that culture specific patterns of organization did not manifest themselves in this task. A holistic evaluation of paraphrases showed that the Japanese samples were rated much poorer than those of Spanish speakers. Non-native writers tended to have less detail and support for generalizations.

Derrick-Mescua, M., & Gmuca, J. L. (1985). *Concepts of unity and sentence structure in Arabic, Spanish, and Malay*. Paper presented at the Conference on College Composition and Communication, Minneapolis, MN. (ERIC Document Reproduction Service No. ED 260 590).

Documents features in L2 writing which may be attributable to the influence of L1 or previous schooling. A year-long study of Arabic-speaking, Spanish-speaking, and Malay-speaking ESL college students included examination of student papers, questioning students during peer-tutoring and teacher conferences, and surveys and essays dealing with the writing backgrounds of students. Based on Koch's work on Arabic rhetoric, the authors conclude that Arabic speakers have difficulty in using a thesis as an organizing principle, and that this is the result of first language influence. The authors also suggest that Arabic and Spanish speakers tend to write "expanded sentences," a series of independent clauses joined by commas and coordinators, because coherence in these languages is achieved by placing all the clauses on a topic together in one sentence. Malay students' writing seems the most similar to American expository writing, and the authors believe that this is due to the similarities in the two schooling systems.

Dicker, S. J. (1986). Abstracting in writing: A study of four ESL college students (Doctoral dissertation, Columbia University Teachers College, 1986). *Dissertation Abstracts International, 47*, 4007A.

Examines individual and cultural features of "abstracting," the process by which writers select and organize information at their disposal in texts. Data included observed composing protocols and written products, written and oral reactions to other students' pieces of writing, observations of non-verbal drawing tasks, and student journals. It was found that all students displayed a lack of high-level planning. Students also showed cultural differences in the genre they used (descriptive vs. narrative), in voice (personal vs. collective), content (emotional vs. physical), and transitions (marked vs. unmarked).

Hu, Z., Brown, D. F., & Brown, L. B. (1982). Some linguistic differences in the written English of Chinese and Australian students. *Language Learning and Communication, 1*(1), 39-49.

Documents cultural differences in composition content, voice, and mood in texts from L1 and L2 writers. Thirty-nine Chinese L2 learners of English and 62 Australian students wrote short compositions (ten lines) on the same three topics, and twelve compositions from each corpus were selected at random for analysis. Cultural influences were found to affect content. For example, on an item asking how one might catch a cold, ten Australians used fate and eight used a virus as a explanation while no Chinese writers did so. Conversely, seven Chinese gave disregarding advice as an explanation while no Australians did so. It was also found that Australians used a wider range of lexical items and had a greater lexical density. Differences were found in voice and mood as well. Australians tended to use more suggestions and qualify assertions while the Chinese students used more explicit imperatives. L1 influence was used to explain why Chinese L2 writers used more "marked themes," or unexpected sentence initial elements, than Australians. An analysis of cohesive ties showed that Australians used comparatively more ellipsis while Chinese used more conjunctions. Australians produced more complex sentences than the Chinese. Errors made by Australians were related to spelling and punctuation, while those made by Chinese learners of English were related more to collocations or tense usage.

Indrasuta, C. (1988). Narrative styles in the writing of Thai and American students. In A. C. Purves (Ed.), *Writing across languages and cultures: Issues in contrastive rhetoric* (pp. 206-226). Newbury Park, CA: Sage Publications, Inc.

Analyzes textual differences in narrative compositions written by L1 American high school students (n=30) and Thai twelfth-grade students writing both in L2 English and L1 Thai (n=30). Compositions were compared for cohesive ties, narrative features, and discourse structure. Interviews conducted with students and the teacher were also analyzed. Findings show that American and Thai students agree that narrative writing serves to inform and entertain, but Thai students also expect it to be a vehicle for exposition and instruction. Narratives in both cultures were found to have similar organizational structure and to employ cohesive devices in a similar fashion. Analysis of narrative features showed the greatest differences between Thai and American writers. Thai students' writing in English was found to share more features with the Thai language sample than the English narratives.

1.2.2 Native vs. non-native writers

Connor, U., & McCagg, P. (1987). A contrastive study of English expository prose paraphrases. In U. Connor & R. B. Kaplan (Eds.), *Writing across languages: Analysis of L2 texts*. Reading, MA: Addison-Wesley Publishing Company, Inc.

Examines the ability of English L1 writers (n=11), Japanese L1 English L2 writers (n=11), and Spanish L1 English L2 writers (n=11) to paraphrase a short newspaper article. All subjects read the article, answered questions about it to assure comprehension, and wrote paraphrases of it. It was found that native speakers had a tendency to concentrate on one or two of the three main points and elaborate with details while non-native writers tended to mention all main ideas with less elaboration. Also, non-native speakers were more likely to maintain the order of the original in their paraphrases. Japanese speakers (n=11) did not use task contextualizing devices such as "This article discussed ..." while English and Spanish speakers did.

Harley, B., & King, M. L. (1989). Verb lexis in the written compositions of young L2 learners. *Studies in Second Language Acquisition, 11*(4), 415-439.

Compares lexical proficiency of French immersion students with Francophone peers. Five compositions each produced by 69 sixth-grade Anglophone French immersion students were compared with five compositions each from 22 Francophone students. The compositions consisted of two narratives and three request letters. Each composition was coded for each occasion of use (token) of a particular verb lexeme, or verb type, as well as lexical errors made. Native speakers produced more text and more verb types and made fewer lexical errors than did the immersion students. Native speakers also evidenced more lexical variety (as measured by a type-token ratio), more specificity, and more sophistication in their choice of verbs (as measured by how often writers used relatively infrequent verbs). Native speakers used 59% more verb types than immersion students. Both groups, however, used certain verbs with greater relative frequency than others. Immersion students tended not to use verbs which had no direct translation equivalents to English, and prefer verbs which fit syntactic frames similar to those in English. Inflectional complexity did not appear to deter immersion students from using verbs. The authors suggest that the instructional environment in which immersion students learn French L2 does not foster a very wide range of productive lexical knowledge.

Harris, D. P. (1983). *The organizational patterns of adult ESL student narratives: Report of a pilot study*. Paper presented at the Annual Convention of Teachers of English to Speakers of Other Languages, Toronto, Canada. (ERIC Document Reproduction Service No. ED 275 150).

Analyzes the organizational structure and emphasis of L2 writers' narratives. Thirty-five narratives written by non-native speakers of English at varying proficiency levels based on a two-minute silent film were analyzed. Compositions were holistically evaluated by two raters on a four-point scale and subjected to a text analysis. Most compositions were found to contain the same six main narrative points or events from the film. An analysis of the percentage of compositions dedicated to each of the six points showed three main patterns of narrative development. No connection was found between holistic composition score, writers' background countries, or writers' English proficiency and type of pattern used. However, ratings by native speakers of English showed that they preferred one pattern over the others, in which the largest percentage of prose is spent on the climax of the story close to the end. Using the same task with native speakers of English (n=12), it was found that the preferred pattern was

predominant in English L1 writing. Furthermore, although native and non-native writers opened their narratives in similar ways most of the time, ESL writers tended to eliminate preliminary scene-setting information and begin in the middle of the story, while native writers spent proportionately more prose on scene-setting information.

Kaplan, R. B. (1978). *Contrastive rhetorics: Further speculations.* Paper presented at the Conference of the American Association of Applied Linguistics held in conjunction with the annual meeting of the Linguistic Society of America, Boston, MA. (ERIC Document Reproduction Service No. ED 172 582).

Proposes that focus, how writers orient readers to prominent information in a text, is realized through syntactic structure, and that ESL writers may experience L1 interference in providing focus in English. Sixteen two- to three-sentence segments with utterances deleted were given to native (n=48) and advanced non-native (n=146) writers, along with multiple choice completion alternatives. Results showed significant differences in performance between groups on thirteen items, both in terms of preferred response choice and on the distribution of responses on distractor items. The author contends that native and non-native writers differ in what they assume to be shared knowledge between writer and reader. Also, he believes that native and non-native writers differ in the strategies they use to develop and keep the focus on a topic.

Norment, N. (1982). *Contrastive analyses of organizational structures and cohesive elements in English, Spanish (ESL) and Chinese (ESL) students' writing in narrative and expository modes.* (ERIC Document Reproduction Service No. ED 269 764).

Compares the organization of texts and use of cohesion in L1 and L2 writers of English from different linguistic backgrounds. Groups of 30 Chinese-speaking, 30 Spanish-speaking, and 30 native-English-speaking college students, each with varied levels of writing proficiency, were selected for the study. Each subject wrote one narrative and one expository essay. Data were analyzed using the "Milic logical categories" for organizational patterns and an adaptation of Halliday and Hasan's cohesion framework. Each group was found to vary in organizational patterns, although the three groups agreed in the most frequent organizational link used. It was found that each group varied in the sorts of cohesive ties used as well. Native writers produced the most cohesive ties. Use of organization patterns and cohesive ties did not vary by genre for any of the groups.

Ostler, S. E. (1987). English in parallels: A comparison of English and Arabic prose. In U. Connor & R. B. Kaplan (Eds.), *Writing across languages: Analysis of L2 text.* Reading, MA: Addison-Wesley Publishing Company, Inc.

Compares clause characteristics of texts produced by Arabic L1 writers of English with published English language texts. Using T-unit analysis and the "Pitkin Discourse Bloc," ten paragraphs were selected at random from English publications and compared with 22 short English essays written by native speakers of Saudi Arabic. It was found that non-native writers wrote shorter T-units with more dependent clauses than in the native writing corpus. Saudi students used significantly more coordinate clauses with *and* or *or*. Also, Saudis used coordinate clauses modified by a dependent clause, while there is no incidence of this in the native English corpus. The discourse block analysis confirms these findings. Finally, many of the Arabic writers began their essays with a "superordinate," a very global or general statement, and ended their papers with a formulaic or proverbial statement. The author attributes these findings to a stylistic preference transferred from Arabic.

Scarcella, R. C. (1984). How writers orient their readers in expository essays: A comparative study of native and non-native English writers. *TESOL Quarterly, 18*(4), 671-688.

Investigates how native (*n*=30) and non-native (*n*=80) writers of English orient readers in the introductory sections of essays. Opening portions of timed essays which preceded the thesis statement were coded and analyzed by two investigators. It was found that highly proficient native English writers employed a variety of devices to get the reader's attention while non-native writers used these devices less frequently, had a smaller repertoire, and used the devices in different ways. It was also found that native speakers used more explicit statements and "pre-sequences" to mark the theme of their text than non-natives. Furthermore, results suggested that repetitions and paraphrases are used to signal the theme more frequently by less proficient writers in both first and second language. In addition, non-native writers wrote longer orientations than their native counterparts, and the author suggests that non-native writers tend to overspecify the theme by introducing information which native readers might consider unnecessary or irrelevant.

Söter, A. O. (1988). The second language learner and cultural transfer in narration. In A. C. Purves (Ed.), *Writing across languages and cultures: Issues in contrastive rhetoric* (pp. 177-205). Newbury Park, CA: Sage Publications, Inc.

Explores linguistic and cultural differences in narrative compositions. Texts written in English were collected from 223 sixth- and eleventh-grade Australian students who were native speakers of English, Vietnamese, and Arabic, and text analyses were done. It was found that Vietnamese L1 and Arabic L1 writers differed in the proportions of lexical categories such as pronouns, conjunctions, and prepositions they employed in English L2 writing. Grade six Arabic L1 students used a considerably higher percentage of coordinating conjunctions than other groups, and Arabic speakers in general showed a tendency to include more detail in their narratives. It was found that eleventh-grade Vietnamese students tended to write more lengthy introductions to narratives than other groups and to write more about emotional and mental processes of characters. English L1 writers' stories were found to be very homogeneous in structure.

Woodley, M. (1985). Text grammar and learning writing. *Le Français dans le Monde, 24*(192), 60-64.

Compares the writing of a native writer of French and a British first-year French student for syntactic and "information packaging" (given-new) features. The two texts, composed from notes supplied by the researcher, are presented as representative of a larger corpus of data (*n*=unspec.). The L2 text was characterized by shorter syntactic units, less subordination, and fewer connectors. The author contends that a lack of connectors means that a L2 writer is not as effective as a L1 writer in organizing text hierarchically to highlight or de-emphasize various elements, delineating a theme throughout the text, or making the logical connections between textual propositions clear. Grammatical subjects were examined for differences in "information packaging." It was found that the L2 writers used more *there is/are* type constructions, anaphoric pronouns, and repeated and synonymous nouns in subject position than L1 writers. Furthermore, L1 writers made much greater use of nominalizations of previous propositions. The author suggests that this gives their texts greater cohesion.

1.2.3 Relationship to L1 linguistic and cultural background

Achiba, M., & Kuromiya, Y. (1983). Rhetorical patterns extant in the English compositions of Japanese students. *JALT Journal, 5*, 1-13.

Analyzes the rhetorical organization of compositions using Kaplan's (1966) framework. One hundred and thirty compositions written by Japanese students enrolled in ESL classes were analyzed for organizational structure and put into one of five categories: 1) structure characteristic of English linear expository prose; 2) structure beginning like English expository style, but with weak endings; 3) no apparent structure around a topic sentence; 4) structure attributable to an "Oriental" style which is indirect and inductive; and 5) totally unstructured composition. Inter-rater reliability in categorization was over 90%. Thirty-four percent of the compositions were found to exhibit a linear style, and 27% were found to exhibit the "Oriental," indirect and inductive, style. Twenty-four compositions written in Japanese L1 were collected for comparison, of which seven were written by subjects in the previous group. Forty-six percent of the Japanese L1 compositions were found to exhibit an indirect style; 29% exhibited the linear style. All seven pairs of Japanese L1 and English L2 compositions written by the same individuals were found to exhibit the same organizational style. Evidence for transfer of stylistic features from Japanese L1 to English L2 is also presented.

Bartelt, H. G. (1982). Tense switching in narrative English discourse of Navajo & Western Apache speakers. *Studies in Second Language Acquisition, 4*(2), 201-204.

Discusses the influence of Native American L1 on the use of the English tense-aspect system by L2 writers. In the Navajo and Western Apache languages, the use of tenses to reflect time is not as important as it is in English. Rather, the type of action is emphasized through mode and aspect. Speakers of these languages, it is hypothesized, make transfer errors when they attempt to express these modes and aspects using the English L2 verb tense system. For example, students may use simple present tense to express habitual action, imperfective mode, and continuative aspects of action regardless of the time in which the action took place (present, past, or future).

Bartelt, H. G. (1983). Transfer and variability of rhetorical redundancy in Apachean English interlanguage. In S. M. Gass & L. Selinker (Eds.), *Language transfer in language learning*. Rowley, MA: Newbury House.

Hypothesizes the transfer of a Navajo L1 strategy for emphasis into English L2 writing. Seven hundred and forty-five compositions and letters were collected from 140 English L2 students. Evidence is found that subjects transfer a strategy of lexical repetition for emphasis from Navajo L1 to English L2. The repetition occurs primarily in relating topics that are emotionally laden or in persuasive texts. Based on corrections done by two English composition teachers on a random subsample of 20 compositions, redundancy was defined as three or more repetitions of lexemes, phrases, or sentences per 100 words. The most frequently repeated lexemes in 20 compositions were found to be words relating to emotions, material value (e.g., money), and the kinship system (e.g., family). Phrases and sentences were repeated less frequently than individual lexical items.

Frestedt, M., & Sanchez, M. (1980). *Navajo world-view harmony in directives for English texts*. Paper presented at the Annual Meeting of the University of Wisconsin/Milwaukee Linguistics Symposium, Milwaukee, WI. (ERIC Document Reproduction Service No. ED 193 661).

Illustrates cultural differences in expectations for written prose through 13 compositions written by Navajo students. The authors assert that traditional Navajo discourse divides discourse responsibilities differently than the American mainstream. Speakers or writers in this culture are required only to show evidence of knowledge about the subject, while listeners or readers are expected to connect and evaluate knowledge from the speaker/writer. The authors give some examples from the composition corpus which support this claim. Second, they claim that Navajo students tend to structure their papers so that the focus shifts from objective to intensely personal over the course of the text. They attribute this to a Navajo world view in which everything has a duality of outer form and inner form. Third, the authors believe that Navajo students writing in English show the influence of first language, in which activity and change are stressed and verbs play a larger role than in English.

Kaplan, R. B. (1966). Cultural thought patterns in inter-cultural education. *Language Learning*, *16*(1-2), 1-20.

Hypothesizes that second language learners transfer expository rhetorical styles for paragraph organization from L1 writing when writing in English L2. Approximately 600 compositions written by college-level foreign students were analyzed. The researcher asserts that Arabic or "Semitic" rhetorical style is characterized by a series of parallelisms joined by conjunctions, rather than the subordination typical of native English expository writing. The writing style of native speakers of Chinese and Korean, or "Oriental" rhetorical style, is said to be characterized by a series of topics tangentially related to the topic under discussion, contrasting with the native English writer's linear rhetorical style. The expository writing style of "Romance" language speakers—French and Spanish—is said to allow more room for what native writers of English would regard as digressions from the topic under discussion. Examples of compositions written in English L2 by L1 speakers of Arabic, Chinese and Korean, and French are used as illustrations of these rhetorical tendencies appearing in non-native writing.

McKay, S. L. (1989). Topic development and written discourse accent. In D. M. Johnson & D. H. Roen (Eds.), *Richness in writing: Empowering ESL students* (pp. 253-262). New York: Longman, Inc.

Considers cultural differences on topic development. One hundred thirteen essays written by Chinese EFL students and essays written by (n=27) ESL learners in the U.S. from various cultural backgrounds on the topic of taking the bus in a rainstorm were examined. Chinese learners of English and second language students in the U.S. were found to differ in several ways in their development of the topic. For example, Chinese students used more metaphoric language than the American-educated students, and tended to draw moral lessons in concluding their essays while the U.S. ESL students did not. American ESL students, on the other hand, showed more concern for time pressure and public opinion than did the Chinese EFL students in their essays. The author concludes that one's experiences within a culture play a large role in how writing topics are developed, contributing to a "written discourse accent" in non-native language writing.

Mediola, S. E. (1984). *Written English of Mexican-American students: A study of grammar, structure, and organization* (Doctoral dissertation, University of Michigan, 1984).

Documents linguistic characteristics of English texts produced by bilingual college freshmen. One hundred sixty-one Spanish-English bilingual students participated in the study. Language background surveys indicated that 120 of the group were English-dominant bilinguals and 40 were Spanish-dominant bilinguals. Subjects wrote 30-minute essays which were holistically rated by at least two trained raters, and analyzed in terms of words, sentences, and T-units per composition; words per T-unit; words and T-units per sentence; dependent clauses per composition; subordinating conjunctions; total connectors; subordinating conjunctions and total connectors per T-unit; and an error analysis. Compositions by English-dominant bilinguals were more highly rated. Number of words, T-units, and sentences per composition increased with higher ratings, while words per sentence and words per T-unit decreased. These objective text measures, however, accounted for only 40% of the variance in holistic scores, according to a stepwise regression analysis. Features attributed to linguistic transfer or non-standard dialect influence included: the use of wrong word form ("violence movies"); use of Spanish comparative and possessive formations ("more big," "boy parents"); incorrect verb inflections ("the girl sing"); and incorrect prepositions ("violence in television").

Nishimura, Y. K. (1986). Prose-organizing strategies of Japanese college students: A contrastive analysis. *Descriptive and Applied Linguistics, 19*, 207-218.

Hypothesizes that rhetorical organization patterns differ in Japanese and in English, and that English L2 writers will transfer Japanese L1 patterns. Participants (n=59 American students and n=276 Japanese students) were put into three groups. American students were asked to reorganize an expository prose passage in which the sentences had been scrambled. Second, a group of intermediate and a group of advanced Japanese EFL learners were asked to unscramble the same prose passage. Third, another group of intermediate and advanced Japanese EFL students were asked to unscramble the same passage translated into Japanese. Results showed that there were significant differences in how Japanese and English speakers organized passages in their native languages. Furthermore, it was found that intermediate EFL learners used similar organizational strategies in English while advanced learners used different organizational strategies in English. The author concludes that cultural transfer does occur, but that its effects weaken with L2 development.

Ricento, T. K. (1987). *Aspects of coherence in English and Japanese expository prose* (Doctoral dissertation, University of California, 1987).

Examines rhetorical organization patterns of Japanese L1 learners of English. Ten Japanese language newspaper editorial texts, their English translations, and five English language texts were analyzed and compared for elements of coherence, including: theme (main idea); paragraph linkages from Longacre (1976); Meyer's (1985) taxonomy of logical and rhetorical patterns; literary conventions; and cultural values and attitudes (such as reader and writer responsibility). Then, each of the texts were cut into separate paragraphs, and scrambled. Thirty bilingual Japanese-English speakers and 23 monolingual English speakers were asked to reorder the paragraphs of two of the texts, give them a title, and write a short summary. Approximately half the subjects were also given follow-up interviews. Japanese L2 and English L1 speakers performed similarly in re-ordering English translations of Japanese texts. In general, readers were better at choosing initial and final paragraphs than at matching overall

order. Two Japanese newspapers from which the texts were taken were found to have differences in rhetorical structure. Analysis of summaries and titles showed no relationship between subjects' ability to reorder paragraphs in the text, and their ability to identify the main ideas of the text. Finally, evidence is found in some texts for the *ki-shoo-ten-ketsu* rhetorical pattern, and Japanese L1 speakers were able to reconstruct such texts more easily than American English L1 speakers.

Rittershofer, J. S. (1987). The nominal reference system in the interlanguage of Japanese students writing in English (Doctoral dissertation, Columbia University Teachers College, 1987). *Dissertation Abstracts International, 48*, 119A.

Compares the nominal reference systems of Japanese and English, and documents the influence of Japanese L1 in L2 English writing. It is noted that Japanese makes little use of pronominals, either using full forms or ellipsis. Lexical cohesion is used more than reference cohesion, and lexical phrases are repeated instead of pronominalized or substituted. Demonstratives and numeratives take some of the roles which English assigns to articles. Seventy-two essays collected as part of a TOEFL test using a picture stimulus are analyzed. For nominal reference system errors Japanese L1 writers are found to transfer grammatical structures that exist in both Japanese and English (e.g., demonstratives), sometimes at the expense of more idiomatic or appropriate English devices (e.g., pronominals). Eleven of the sample texts are selected as representative of a developmental interlanguage continuum which the author asserts occurs in the English L2 nominal reference system of Japanese L1 speakers. The traditional Japanese rhetorical framework, *ki-sho-ten-ketsu*, is hypothesized to influence students' texts, and evidence from nominal reference usage is presented in support. Errors are seen as representing developmental differences in the L2 learning strategies which are used.

Santiago, R. L. (1970). *A contrastive analysis of some rhetorical aspects in the writing in Spanish and English of Spanish-speaking college students in Puerto Rico* (Doctoral dissertation, Columbia University, 1970).

Compares the organizational patterns of bilinguals writing in L1 Spanish and L2 English. Two paragraphs, one in Spanish and one in English, were parsed into sentences and scrambled. Subjects (n=58) were asked to unscramble the paragraphs, and to write compositions in Spanish and in English. In addition, one group of students wrote compositions in both Spanish and English on the same topic. Compositions were holistically evaluated, and analyzed according to Milic's (1969) logical categories. Subjects were found to be more successful in unscrambling the Spanish than the English paragraph. All subjects received higher holistic ratings on Spanish (L1) essays than on English (L2). Logical category analysis revealed substantial similarities between English and Spanish texts, although there were some minor differences. For example, students used more additives when writing in English (L2) and more explanatories when writing in Spanish (L1).

2.0 NON-NATIVE WRITING PROFICIENCY DEVELOPMENT

References in this section document the development of writing proficiency in a non-native language. Studies in Section 2.1 document the development of literacy in young bilingual children. Often the relationship between L1 and L2 in literacy development is addressed. Studies in Section 2.2 focus on growth in non-native literacy skills in the later elementary and secondary years. Studies in Section 2.3 focus on non-native writing proficiency in L1-literate adults, usually college students. Many of these studies are cross-sectional, or compare development of L2 writing to a L1 writer norm.

2.1 Bilingual emergent literacy

Edelsky, C. (1982a). Writing in a bilingual program: The relation of L1 and L2 texts. *TESOL Quarterly, 16*(2), 211-228.

Examines the writing of children (*n*=26) enrolled in a Whole Language approach bilingual program for the relationship between L1 (Spanish) and L2 (English) texts. It was found that the children used similar segmentation strategies in L1 and L2. Children exhibited invented spellings in L1 and L2, and applied L1 orthographic knowledge to L2 spelling. However, they recognized some features, such as the letter "k" in English and accent marks in Spanish as being particular to that language and rarely used in the other. Personal writing style was applied in both languages. Code-switching in writing was found to be less frequent than in speaking, and almost entirely intrasentential. Code-switching from L1 to L2 seemed more deliberate and involved more nouns and adjectives while switching from L2 to L1 was rare and involved mostly function words.

Edelsky, C. (1982b). Three myths about literacy and some counter-evidence. *Journal of the Linguistic Association of the Southwest, 5*(1-2), 66-84.

Asserts that three widespread "myths" about literacy acquisition are false. These are: 1) young writers are insensitive to the needs of audiences; 2) young writers are insensitive to text demands; and 3) literacy is the mastery of a set of skills. It was found that children adjusted register, language, and amount of contextualization of the message according to the intended audience. The author argues that audience sensitivity grows out of relationships, not lessons. Also, it was found that children were quite sensitive to different genres. Stories, journals, letters, and expository pieces had different types of beginnings and endings and links between clauses. Written language was also distinctly different from oral language. The author argues that sensitivity to different texts was developing as a result of interaction with (as listeners/readers) print environments. Finally, it is shown that children actively construct hypotheses about spelling, punctuation, and segmentation rather than simply accumulate skills.

Edelsky, C. (1983). Segmentation and punctuation: Developmental data from young writers in a bilingual program. *Research in the Teaching of English, 17*(2), 135-156.

Highlights the intertwining of contextual and cognitive factors in writing development. In-class writing samples were collected from first- (*n*=9), second- (*n*=8), and third-graders (*n*=8) for one week periods, four times during the school year. Subjects were children of Hispanic migrant workers enrolled in a bilingual program. In addition, the data included interviews with teachers and aides, observations, test scores, and school records. Coding categories for punctuation and segmentation emerged during data analysis. It was found that segmentation was accomplished primarily on syntactic and

phonological/morphological bases, and that early segmentation patterns reveal children's syntactic categories. Unconventional segmentation patterns decreased both within and across grades, and tended to switch from a syntactic to syllabic basis over time. Early unconventional punctuations were focused on specific segments such as lines. Furthermore, it was found that the nature and context of writing tasks influenced segmentation and punctuation patterns.

Edelsky, C., & Jilbert, K. (1985). Bilingual children and writing: Lessons for all of us. *The Volta Review, 87*(5), 57-72.

Reports on a year-long study of the in-class writing of first-, second-, and third-grade children (n=26) in a bilingual education program in the southwest United States. It was found that it was not necessary for children to have total control over spoken English before they learn to read and write it. Also, it was found that the invented spellings of children who had learned literacy skills in their L1 first did not follow the same pattern for L2. Rather, children applied Spanish (L1) orthographic knowledge to English spelling until they learned English phonic generalizations. Once they had done so, knowledge of Spanish orthography did not interfere with English phonic generalizations. Code-switching occurred rarely in writing samples and differed qualitatively for L1 and L2 texts. These findings are used to argue that learners do not confuse L1 and L2 systems, but that they do borrow from one system to augment their capacity to communicate in the other.

Hadaway, N. L., & Cukor-Avila, P. (1986). *Composing in two languages: A bilingual child's response*. Paper presented at the Annual Meeting of the National Social Science Association, San Antonio, TX. (ERIC Document Reproduction Service No. ED 280 288).

Reports on written interference and code-switching among 35 Spanish L1/English L2 third-grade children in a bilingual program. Data consisted of writing samples collected weekly from January-May 1985. It was found that only six students wrote at all in Spanish, and that their choice of language was influenced by genre. Only seven students engaged in any written code-switching, and switches were likely to be only word or short phrase length. Code-switching was also influenced by genre, and occurred more frequently in free writing. Writing about personal experiences or about culturally specific matter (e.g., holidays) brought out the most code-switching. Overall, interference errors were much more common than code-switching.

Hudelson, S. (1989). A tale of two children: Individual differences in ESL children's writing. In D. M. Johnson & D. H. Roen (Eds.), *Richness in writing: Empowering ESL students* (pp. 84-99). New York: Longman, Inc.

Reports on individual differences in the writing development of two bilingual children from a whole language instructional perspective. The researcher served as classroom volunteer in a second-grade classroom one day a week for a school year, documenting classroom literacy instruction. The researcher also tutored two children in the class, following precepts of whole language instruction. Drawings were the primary medium of self-expression for one student, and spoken narratives accompanying them were consistently more complex and complete than the writing which accompanied them. The student was reluctant to express himself in writing, particularly in English L2, and preferred writing sentences and words practiced in class workbooks. The other student's writing was similar for the first half of the year, but she gradually started to write more, and was more willing to take guesses, make mistakes, and ask for information from outside sources. She used Spanish to elicit oral English translations

to help her in English L2 writing. She also began to show signs of revising, rereading her texts and adding information to what she had previously written, and was willing to use invented spellings and to pay less attention to handwriting than the other student. The author believes that these individual differences would lead to differential progress in second language literacy acquisition.

Nathenson-Mejia, S. (1989). Writing in a second language: Negotiating meaning through invented spelling. *Language Arts*, *66*(5), 516-526.

Discusses invented spellings found in the non-native writing of bilingual students, and how their knowledge of Spanish and English orthography was utilized in order to write texts in English. The researcher spent nine 90-minute sessions with 12 first-grade students enrolled in a bilingual program in a Mexican school. Sessions consisted of the researcher reading an English book to the children, discussion in English (L2) and Spanish (L1) with the children, a shared rereading, and time for the children to draw a picture about the story and write a caption in English. Invented spelling in the resulting writing samples were separated into six main categories which were related to phonological differences between English and Spanish. Subjects tended to substitute Spanish *es* for English *s* sounds, *d* for English *t* or *th* sounds, *ch* (as in "chair") for English *sh* (as in "shy") sounds, Spanish *j* for English *h* sounds, and *g* for English *w* sounds. The author notes that because the graphophonetic correspondence between vowels and their spelling is more direct in Spanish than in English, spelling vowel sounds in English posed a particular challenge, and students tended to represent English vowel sounds with Spanish orthographic equivalents. The author asserts that the children's spelling strategies show that they are using their greater knowledge of Spanish orthography to negotiate spellings in English, while actively working through similarities and differences between the two languages.

Piper, T. (1989). *Written language growth in a multiethnic classroom.* Paper presented at the Second Language Research Forum, Los Angeles, CA. (ERIC Document Reproduction Service No. ED 308 528).

Compares writing skills of bilingual (*n*=8), monolingual (*n*=8), and beginning ESL students (*n*=8) in a second-grade classroom. Texts produced in the classroom were collected and put into a computer database. Each text was coded using a scheme from the Crediton project (Wilkinson et al., 1980). The scheme assumes that children's writing shows development from concrete to abstract, as they "decentre" and learn increasing sensitivity to audience, replacing stereotypical with original ideas. Subcategories included: describing (language used to label, name, report), interpreting (language used to explain, infer, and deduce), generalizing (language used to form abstractions, to summarize, classify), and speculating (language used in conditional reasoning, exploring, theorizing). Most of the language use was found to be descriptive. Bilingual students used less descriptive language than the other two groups, and more speculating and generalizing language, although there was large individual variation. Native speakers wrote the most, and received the highest holistic ratings on their writing.

Pringle, M. V. (1986). Learning to write in French immersion. *Carleton Papers in Applied Language Studies*, *3*, 27-45.

Documents the writing development of first-grade (*n*=14) and second-grade (*n*=8) Canadian children enrolled in a French immersion program. Three main stages are distinguished. In the first stage, children make use of drawing as a precursor to writing. Children's writing is done for their own pleasure and is closely linked to their

own experience. Children are influenced by the basal reader vocabulary and formulaic phrases. Students are generally afraid to take risks or make mistakes. The length of this stage varies by individual. In the second stage, children overcome their fear of mistakes and begin to use invented spellings and original stories. L1 (English) influences vocabulary and spelling conventions. Grammatical gender is difficult for the children, and at the first-grade level boys tend to use *mon* (masculine pronoun) and girls tend to use *ma* (feminine pronoun) invariably. Children also find verb conjugation difficult and tend to use third person singular uniformly. By Grade Two most students reach a third stage in which punctuation and spelling approach standard usage. Stories are more coherent, and children tend not to be the primary participants in their stories. More transactional and poetic genres of writing appear. Anglicisms continue to be pervasive.

Quintero, E. (1984). *Preschool literacy: The effect of sociocultural context.* (ERIC Document Reproduction Service No. ED 282 181).

Examines the development of literacy in a five-month-long study of a bilingual preschool classroom (n=12 students). Social interaction was found to be important to children's writing, and proficiency in language and literacy behaviors such as drawing, writing, or print recognition were employed and practiced through social interaction. Students' language use was found to be greatly influenced by role models in the classroom. Also, some evidence of peer teaching was found.

Samway, K. D. (1987). *The writing processes of non-native English-speaking children in the elementary grades* (Doctoral dissertation, University of Rochester, 1987).

Teaching and learning of writing in an elementary ESL classroom are described using ethnographic techniques. Three hundred sixty-one texts written by eight second- and third-graders and seven fourth- and sixth-graders were collected over a four-month period and holistically evaluated. Data also included field notes, transcripts of writing conferences, and transcripts of student interviews in which they evaluated texts and commented on their own writing processes and skills. The least confident and experienced writers used fewer revision techniques than the more confident, and only the most experienced writers rearranged text during revision. Older children revised more of their drafts than younger ones, and were more likely to go through several drafts. The majority of revisions left the original gist of the text intact, but added, deleted, or rearranged the information. Overall, revisions tended to improve the quality of drafts, but there was a great deal of individual variation. Instructional focus or approach is said to influence the revision process. When children were asked to evaluate texts, most of their comments were about how well a story was focused or developed.

Seda, I., & Abramson, S. (1989). *English writing development of young, linguistically different learners.* (ERIC Document Reproduction Service No. ED 321 882).

Documents the literacy development of LEP children in a kindergarten classroom. Twenty-one of the 28-31 children in the class during the year were LEP students. Daily journal-writing sessions in the classroom, in which groups of five to six children wrote or drew in journals on topics of their choice and discussed their work with the teacher, were videotaped periodically over the course of a school year and analyzed. Three illustrative case studies were selected for closer analysis. Over the course of the year, the case study children were found to differ individually in their language learning and their preferences for expressing themselves through speaking and writing. Overall, however, their literacy development followed patterns quite similar to those

documented in first language literacy development. Because the case study children started the year with little or no English proficiency, the authors assert that learners need not be proficient speakers in the second language to benefit from oral and written transactions in that language. The data also demonstrated the interrelatedness of oral and written language in interactive journal writing. Interaction with the teacher was particularly important. The teacher served as language mediator to interpret children's drawing and writing, and provided vocabulary. The teacher used questions, elaborations, repetitions, and language modeling in order to elicit spoken and written language production.

Swain, M. (1975). Writing skills of grade three French immersion pupils. *Working Papers on Bilingualism, 7.* (ERIC Document Reproduction Service No. ED 125 262).

Compares compositions written by French and English-educated Anglophone students. Short stories based on pictorial stimuli were collected in English L1 and in French L2 from 40 Anglophone students enrolled in a French immersion program, and compared to compositions written by 24 Anglophone English-educated students. Compositions were then analyzed for vocabulary, mechanics, syntactic features, and creativity. An analysis of vocabulary variety showed that immersion students did not differ significantly from English-schooled students in English writing. Vocabulary variety was found to be quite similar in English and in French for the immersion students. Immersion students made fewer errors in English writing than English-schooled peers. However, they made proportionally many more errors in French than in English writing. These errors included the incorrect use of English words or words in French with a similar form or meaning to the one intended, incorrect verb forms, lack of subject-verb agreement, misuse of prepositions, incorrect gender, omission of pronouns, spelling and word order errors. French immersion students writing in English made some punctuation errors, such as misuses of apostrophes, which were rarely made by English-schooled students. Immersion students' syntactic complexity in English was comparable to that of English-schooled children.

Urzúa, C. (1987). "You stopped too soon": Second language children composing and revising. *TESOL Quarterly, 21*(2), 279-304.

Explores the writing process and development of elementary school children. Four Indochinese upper elementary students who had attended school in the United States for at least two years were the subjects of this study. They were instructed through a writing approach which included revision and peer review, and dialogue journal writing. Fifteen 45-minute weekly sessions were taped and analyzed in three areas: sense of audience, sense of voice, and sense of power in the language. It was found that, as with native speakers, peer review had significant effect on awareness of audience. Also, it was found that sense of voice was strengthened when children took control of their own writing topics and that there were individual differences in children's preferred means of developing topics. Finally, children exhibited growth in their ability to manipulate and reshape written language, and their ability to add to their written repertoire. The author concludes that both the cognitive and social aspects of literacy develop in similar ways for ESL & native English young writers.

2.2 Later elementary and secondary

Ammon, P. (1985). Helping children learn to write in English as a second language: Some observations and some hypotheses. In S. W. Freedman (Ed.), *The acquisition of written language: Response and revision.* Norwood, NJ: Ablex.

Examines improvements in L2 writing over the course of a school year from a neo-Piagetian perspective. Using picture stimuli, children in 13 third-grade classrooms, both bilingual and English medium, produced writing samples in the Fall and Spring of a school year, which were rated for use of genre, cohesion, clarity of reference, coverage and elaboration of basic content, and conventional usage. The writing of four students who had improved significantly more than other students in their classes was examined closely. Improvements were found to include better establishing the setting of stories before the story action begins, better identifications of characters (e.g. clearer referents), the use of more anaphoric cohesion, and spelling and word choice closer to standard English. Inadequacies in Fall samples and improvements in the Spring are considered from the neo-Piagetian theoretical perspective of "cognitive operators" (Pascual-Leone). In this perspective, writing depends upon being able to access available knowledge about the language and the task at hand, and to coordinate and monitor its application.

Bruck, M., Lambert, W. E., & Tucker, G. R. (1977). Cognitive consequences of bilingual schooling: The St. Lambert Project through grade six. *Linguistics: An International Review, 187,* 13-33.

Evaluates the composition skills of French L2 students as part of a continuing series of reports on the progress of children enrolled in the St. Lambert Project. The project was an experimental program in primarily French medium instruction for English speakers. English L1 French L2 students in fifth and sixth grade were tested, and results compared to tests done on French monolingual children in French medium programs. Results indicated that French L2 subjects in the fifth grade fell noticeably behind the French L1 subjects in composition skills. Subjects in the sixth-grade French L2 group differed from the French-schooled L1 group in the content but not the form of their compositions. L2 learners make more grammatical errors than their French L1 counterparts, and may have avoided additional errors by using simpler constructions and vocabulary which did not carry the same richness of content and ideas. While students do not have the same competence as native speakers of French in writing, their oral communication skills were found to be comparable.

Chang, W. L. (1971). *A comparison of certain structures written in English by monolingual and bilingual sixth graders* (Doctoral dissertation, Boston University School of Education, 1971).

Correlates textual features of monolinguals' and bilinguals' writing with standardized tests of language proficiency, intelligence, and socio-economic status. The writing of bilingual (n=57) and monolingual (n=72) sixth-grade students in two northeastern U.S. urban communities was compared. Data included an intelligence test, measure of bilingualism and socio-economic status, two discrete point language tests, and six writing samples from each subject. It was found that monolingual and bilingual students were more homogenous in socio-economic background and many language skills in one community than in the other. In the non-homogeneous sample, socio-economic status was moderately correlated with factors relating to the amount and type of subordination. There was also a correlation between socio-economic background and language test scores for bilinguals in this community's sample. Degree of

bilingualism and language performance as measured by text features was not significantly correlated for the less homogenous community sample, and only slightly correlated for the more homogenous community sample.

Elliott, M. (1986). Nasr's development as a writer in his second language development: The first six months. *Australian Review of Applied Linguistics*, *9*(2), 120-153.

Traces the development of a student's L2 writing in a classroom context. Data include observations and videotapes of a student's writing in a classroom context, the texts produced, and interviews. At the end of six months, the subject had written in observation/comment, report, and narrative genres. However, he did not produce expository texts or revise. The author notes that he seemed to follow the same developmental pattern for genres that has been hypothesized for L1 English writers (Martin & Rotheny, 1981). The subject's earliest pieces showed a use of formulaic language. Development occurred in stages rather than in a linear progression. The subject's cohesion in writing moved from a reliance on coordination to use of subordination, and he gradually learned how to use past tense verbs. Translation was used on occasions when he needed to access language which was more advanced than he was capable of in English. The subject's pausing while writing changed over time from merely recording oral (subvocalized) language to planning ahead a clause or phrase, and pauses coincide more with idea units.

Evensen, L. S. (1985). Discourse-level interlanguage studies. In N. E. Enkvist (Ed.), *Coherence and composition: A symposium* (pp. 39-65). Finland: Research Institute of the Åbo Akademi Foundation.

Describes a pilot study tracing the development of written interlanguage, and presents findings on students' use of connectors in L2 writing. The sample is a portion of the "Trondheim Corpus"—compositions and questionnaires collected from eighth- through eleventh-grade Norwegian EFL pupils (n=2295) from various geographic and social groups. The use of connectors is found to increase steadily as a function of skill level within each grade and grade levels. However, it is also found that students show little variety in choice of connectors; i.e., a relatively small number of connector words account for a large percentage of the connectors used in EFL writing.

Ng, B. (1966). *An analysis of the compositions of bilingual children in the fifth grade* (Doctoral dissertation, University of California, 1966).

Correlates text analysis measures with tests of mental ability and bilingualism. Three hundred fifty-six fifth-grade students of Chinese ancestry were administered a test of mental ability and a measure of degree of bilingualism. Three writing samples were collected from each subject. Each writing session was preceded by a discussion period. Texts were analyzed for sentence length, type-token ratio (a measure of vocabulary diversity), total number of words, frequency of certain syntactic patterns, amount and type of subordination, and errors. It was found that more highly bilingual children wrote shorter sentences and shorter compositions, used more run-on sentences, and used less diverse vocabulary. They were less prone to use uncommon syntactic patterns than the less bilingual children. Children displayed some interference errors including word order patterns and literal translations from Chinese and errors in verb inflection. The author concludes that less bilingual children appear to be superior in language usage.

Peyton, J. K. (1986). *Dialogue journal writing and the acquisition of English grammatical morphology.* (ERIC Document Reproduction Service No. ED 276 257).

Documents the written grammatical morpheme acquisition of ESL writers. Fifth- and sixth-grade beginning ESL students' journal writing was collected over the course of a school year and examined for the use of noun and verb-related grammatical morphemes. It was found that rank orders of morphemes in obligatory contexts for the students as a group and as individuals were similar to those reported in earlier studies. However, longitudinally there were individual differences. Use of plural *-s* decreased for most students over the course of the study. Definite articles were used correctly considerably more frequently than indefinite, although students speaking Romance languages mastered both. When the appearance of morphemes was calculated by how often they appeared appropriately, individual differences were found. Use of the possessive *'s* was also influenced by L1. Patterns of acquisition of verb-related morphemes are more uniform.

Rodrigues, R. J. (1974). *A comparison of the written and oral English syntax of Mexican-American bilingual and Anglo-American monolingual fourth and ninth grade students* (Doctoral dissertation, University of New Mexico, 1974).

Compares syntactic features of writing produced by mono- and bilingual students. Subjects included 21 fourth-grade Spanish-English bilingual students, 16 fourth-grade monolingual English speaking students, 19 ninth-grade Spanish-English bilingual students, and 19 ninth-grade monolingual English speaking students. Subjects were randomly selected from five elementary schools and one high school. Bilingual Spanish L1-English L2 students and English monolingual students were identified through language use surveys and teacher evaluations. Each subject was interviewed for a spoken language sample and samples of classroom free writing were collected from each subject. All language samples were then analyzed for words per clause; clauses per T-unit; words per T-unit; S-embedding transformations per T-unit; S-embedding transformations per T-unit in headed nominal, non-headed nominal, and coordinated structures; and the ratio of syntactic and morphological deviations from standard English per 100 words. Analysis through Kolmogorov-Smirnov two sample tests showed few significant differences between monolingual and bilingual students. At the ninth-grade level, bilingual students wrote significantly fewer clauses per T-unit than monolingual students. It was also found that monolingual fourth-grade students employed significantly more words per T-unit in spoken than in written language, while bilingual students did not. The syntactic complexity measures of monolingual subjects increased more from the fourth- to ninth-grade group than in the bilingual fourth- to ninth-grade group. The author calls for relating studies of syntactic characteristics to sociological factors.

Rodrigues, R. (1980). Bilingual and monolingual English syntax on the Isle of Lewis, Scotland. *Research in the Teaching of English, 14*(2), 139-146.

Compares lexical and syntactic features of texts produced by mono- and bilinguals. Oral and written language samples were collected from randomly selected monolingual (n=40) English and bilingual English-Gaelic (n=40) students at two grade levels. Word and clause density were measured. Bilinguals were found to write longer and fewer clauses than monolinguals, although the difference between groups at the secondary school level was not statistically significant. Subjects did not vary significantly on oral measures. The author explains the bilingual primary students' longer clause length as a result of smaller classes with mixed grade levels and skills training outside of academic contexts.

2.3 Literate adults

Anakasiri, S. (1986). Indicators of quality in second language written communication (Doctoral dissertation, Southern Illinois University, 1986). *Dissertation Abstracts International, 48*, 583A.

Relates text quality to syntactic properties such as cohesion and T-units. A 50-minute timed composition task was given to seventy-two advanced ESL students. Resulting data were holistically rated and divided into low, mid, and high quality groups. It was found that high and low groups did not vary significantly on words per T-unit, words per subordinate construction, number of local (word or constituent level) errors, and number of ellipsis and conjunction cohesive ties. However, high groups were found to use substantially more subordinate constructions per T-unit, make fewer global (sentence-level, communication-disrupting) errors and use more reference and substitution cohesive ties. A multivariate analysis confirmed these findings.

Anderson, P. L. (1980). *Cohesion as an index for written and oral composition of ESL learners*. Paper presented at the Annual Meeting of the Midwest Modern Language Association, Minneapolis, MN. (ERIC Document Reproduction Service No. ED 198 529).

Relates spoken and written text quality to use of cohesive devices. The spoken and written narratives of 22 learners of English were analyzed for the use of cohesive devices according to Halliday and Hasan's (1976) framework. Devices were more common in speaking than in writing. Overall frequency of devices was not correlated with scores on a holistic evaluation. However, frequency of reference cohesive devices only was negatively correlated with scores on written narratives. Frequency of conjunction usage was negatively correlated with speaking and positively correlated with writing. Frequency of cohesion also showed no significant correlation with TOEFL scores. However, TOEFL scores were positively correlated with the frequency of correctly used reference ties in writing. This group of learners used lexical cohesion, especially word repetition, most frequently, followed by reference cohesion. Substitution and ellipsis appeared infrequently but almost always correctly. The authors conclude that cohesion frequency analysis is not a particularly useful or reliable tool for examining ESL learners' written discourse.

Arthur, B. (1980). Short-term changes in EFL composition skills. In C. A. Yorio & J. Schachter (Ed.), *On TESOL '79: Focus on the learner*. Washington, DC: Teachers of English to Speakers of Other Languages.

Traces short-term improvements in L2 text quality. One hundred and fifty-two compositions written by 14 students over an eight week period were analyzed for average words per minute, T-unit length, average length of error-free T-units, percentage of error-free T-units, vocabulary type-token ratio, grammatical error frequency, spelling error frequency, punctuation, and percentage of semantic (meaning obscuring) errors. Compositions were divided into those written in the first and second halves of the course. For each half, individual scores on measures were averaged. Significant improvement was noted in students' punctuation. Students used a larger vocabulary (as measured by type-token ratio) and wrote more rapidly. There was also a trend towards improvement in spelling and a larger proportion of error-free T-units. The six Latin American Spanish-speakers in the sample group were significantly better at spelling, punctuation, and vocabulary size than the five Arabic-speakers in the group. Over time, the Spanish L1 writers improved in writing speed, spelling, and the

frequency of error-free T-units, and decreased in semantic errors. Arabic L1 writers, on the other hand, improved in vocabulary range and punctuation. Thus, different language and cultural groups appear to develop differently in L2 writing proficiency. Holistic evaluation of a subsample of 18 compositions written on the same topic showed significant relationships with writing speed, grammatical error frequency, and spelling error frequency. Subject writing quality was found to be unstable. Thus, any evaluations of writing based on a single sample are to be considered problematic.

Connor, U. (1984). A study of cohesion and coherence in English-as-a Second-Language students' writing. *Papers in Linguistics, 17*(1-4), 301-316.

Analyzes and compares ESL learners' and English L1 speakers' writing using Halliday and Hasan's framework for the analysis of cohesion. Two native speaker essays and four essays written by two ESL students, one set at the beginning of a composition course and one set at the end, were selected for analysis. All essays were written in an argumentative mode. Density of cohesion was not found to be a discriminating factor between native and non-native writers. ESL writers had a smaller repertoire of lexical cohesive devices than native writers. It was also found that compared to native writers, ESL writers did not provide adequate support for claim statements and did not link concluding statements to preceding topic discussions.

Cooper, T. C. (1973). *Measuring second language acquisition* (Studies in Language Education No. 6). (ERIC Document Reproduction Service No. ED 095 549).

Compares syntactic patterns employed by L1 and L2 German writers at varying proficiency levels. Samples of writing from 40 native speakers of English enrolled in German class at four different proficiency levels (i.e., ten per level) and ten German-speaking journalists were compared. Clause length was found to increase progressively from level to level. In general, the rate of subordination increased as well, but coordination ratio was not stable across levels. T-unit length increased in a linear fashion by level but coordination ratio was not stable across levels. Compared to Hunt's native English speakers, L2 learners were found to exhibit more rapid syntactic development.

Gilbert, J. W. (1976). *A comparison of syntactic development in the writing of university students, foreign and native.* Unpublished master's thesis, University of California, Los Angeles, CA.

Analyzes syntactic complexity of texts from L1 writers and L2 writers at various proficiency levels. Composition samples were taken from 54 English L2 students enrolled in three levels of ESL and 18 English L1 speakers enrolled in college composition. Mean sentence length, T-unit length, clause length, clauses per T-unit, and T-units per sentence were calculated for samples, and frequency counts were made for various types of subordinate clauses such as noun clauses or adjective clauses. English L1 writers write significantly longer T-units and more T-units per sentence than L2 writers. No significant developmental trend was found for L2 writers on these measures, however. Data suggested that L2 writers might use more main clause coordination than L1 writers. L1 writers used one clause T-units and two T-unit sentences less frequently than L2 writers. Use of adjective clauses increased steadily across ESL proficiency levels but was still significantly lower than use by L1 writers. Adverb clauses were used more frequently by L2 writers than L1 writers.

Jacobs, S. (1981). Rhetorical information as predication. *TESOL Quarterly*, *15*(3), 237-249.

Examines how L1 and L2 writers connect ideas in texts. "Rhetorical density" is defined as the frequency of connections between ideas in the text in general-to-specific, compare/contrast, or other logical relationships. Essays written by American and ESL writers in a pre-medical biology course were analyzed for the ratio of "content predications" and "rhetorical predications" which link the content predications together. It was found that essays rated highest by the researcher contained multiple predications underlying the surface sentence, and more than one type of predication. Essays rated as poor, on the other hand, contained few rhetorical predications.

Johns, A. M. (1980). *Preventing global discourse errors: Problems and approaches to ESOL writing*. (ERIC Document Reproduction Service No. ED 200 060).

Examines the use of cohesion in 365 compositions written by ESL students, using Halliday and Hasan's (1976) system. Common reference errors included inappropriate use of pronouns, articles, and demonstratives. Instances of substitution and ellipsis were rare and, consequently, so were errors in them. Conjunction errors were the most frequent errors, and included over generalization of *and* and *but*. Lexical cohesion was used most frequently, but with less error than conjunction or reference devices. Overrepetition of a lexical item was the most frequent error in this category.

Kameen, P. T. (1980). Syntactic skill and ESL writing quality. In C. A. Yorio & J. Schachter (Eds.), *On TESOL '79: Focus on the learner*. Washington, DC : Teachers of English to Speakers of Other Languages.

Correlates syntactic features of L2 English texts with holistic ratings of text quality. A random sample of 50 compositions written as part of the Michigan Test of English Proficiency were holistically rated and assigned to "high" and "low" groups. Occurrence of 40 syntactic features was then tallied. A Wilcoxon test showed that 15 of the features were significant in differentiating between the two groups. A Bon Ferroni inequality test further showed that 12 of these features were simultaneously significant. These features were collapsed into three more general factors: (1) T-unit length; (2) clause length; and (3) incidence of passive voice. Findings on T-unit and clause length are consistent with Hunt's (1965) findings for L1 writers. No significant correlation was found between good and poor ESL writers in number or type of clause within T-units. Thus, it was the number of words and not the number of clauses per T-unit which differentiated good and poor writers. Kameen believes that good writers reduce clauses to prepositional, participial, and infinitival phrases. Passives, which were used over 6 times as much by good as by poor writers, were correlated with better ESL writing.

Larsen-Freeman, D., & Strom, V. (1977). The construction of a second language acquisition index of development . *Language Learning*, *27*(1), 123-134.

Identifies text features which correlate with holistic composition ratings. Thirty-seven compositions written by ESL students for a placement examination were given holistic ratings and analyzed. Text features such as correct article usage were not found to increase linearly with the holistic composition ratings. The authors believe that this is evidence for a developmental stage theory of second language acquisition. Spelling improved with proficiency, as did lexical choice. Syntax was more sophisticated in more highly rated compositions. Preposition usage was a problem across levels. More proficient writers wrote more, even though there was no time constraint on the task.

Mean length of T-units increased steadily across levels, but the increase was not statistically significant. A relationship was found between the number of error-free T-units produced and holistic ratings. However, determining T-unit boundaries in poorer compositions proved to be problematic.

Lim, H. (1982). *The development of syntax in the writing of university ESL students* (Doctoral dissertation, University of California, 1982).

Analyzes syntactic features of texts produced in two tasks by L2 writers at varying levels of proficiency. The written performances of 120 students at three proficiency levels were analyzed for mean words/clause, mean clauses/T-unit, mean words/T-unit, mean T-units/sentence, mean words/sentence, mean words/error-free T-unit, and mean error-free T-units/sentence. Students were also asked to rewrite texts containing 32 short sentences. A comparison of compositions and rewritings indicated that the rewriting task restricted writers' choice of sentence structure somewhat. Thus, compositions proved more useful than rewritings for discriminating between proficiency levels. More proficient students in the free-writing task wrote fewer sentences, more words per sentence, more error-free T-units and more clauses than less proficient students. They also wrote longer T-units and error-free T-units. Of the measures investigated, error-free T-units per sentence correlated best with placement tests, followed by mean words per error-free T-units, and mean words per T-unit.

Lindeberg, A. C. (1985). Cohesion, coherence patterns, and EFL essay evaluation. In N. E. Enkvist (Ed.), *Coherence and composition: A symposium.* Finland: Åbo Akademi Foundation.

Examines cohesion and coherence in essays by non-native writers at varying proficiency levels. Twenty compositions were selected from a larger corpus. They included ten essays rated as good and ten essays rater as poor by native speakers of English, five essays each on two topics. Coherence was examined through a combination of cohesive analysis and content analysis based on the work of Kallgren and Lieber. Using a theme-rheme analysis on "functional units" (f-units), the author concludes that good essays differ from poor ones in that there are fewer assertions and more supporting f-units. In good essays, themes have identifiable cohesive ties to a previous theme or rheme, and the new information in the rheme is also linked to a previous theme or rheme.

Lindsay, D. B. (1984). *Cohesion in the compositions of ESL and English students.* Unpublished master's thesis, University of California, Los Angeles, CA.

Compares the use of cohesive devices in highly and poorly rated essays. Timed compositions of twenty college students, five each highly rated ESL and native English and five each poorly rated ESL and native English, were taken from a larger corpus in order to examine cohesion. Halliday and Hasan's analytic categories of reference, ellipsis, conjunction, and lexical ties were used (substitution was eliminated). Errors were also tabulated and classified. It was found that ESL writers used more cohesive devices than native writers. However, the poorly rated ESL writers committed far more errors in the use of ties. Thus, it seems that error-free cohesive ties are the important measure in measuring text quality. Also, poorly rated ESL writers wrote shorter T-units, and thus required more cohesive ties. While the "low" group of native English writers relied less on reference and more on conjunction than the two highly rated groups, low ESL writers relied heavily on reference ties and less on lexical ties. Poor ESL writers were found to use considerably more personal pronouns than other groups, while low native writers relied heavily on repetition of lexical items. ESL

writers also tended to vary pronoun usage within the text, making it seem more speech-like.

Linnarud, M. (1975). *Lexis in free production: An analysis of the lexical texture of Swedish students' written work.* (ERIC Document Reproduction Service No. ED 145 702).

Analyzes lexical features English L1 writers (*n*=3) and Swedish L1 English L2 writers (*n*=36) at varying proficiency levels. The ratio of density of error-free "lexical words" to function words was found to be generally lower for non-native writers. As expected, the native speakers' use of lexical items was much more varied than second language writers. More proficient non-native writers made fewer errors overall than less proficient L2 writers, and made proportionally fewer grammar and more word choice errors. Poor spelling was an indicator of a poor essay.

Linnarud, M. (1986). Lexis in composition: A performance analysis of Swedish learners' written English. *Dissertation Abstracts International, 47,* 812C.

Compares lexical characteristics of compositions written by native and non-native writers of English. Timed compositions written from picture stimuli by 42 Swedish learners of English and 21 British students the same age were holistically evaluated by Swedish teachers of English and native-English-speaking university instructors, secondary school teachers, and students the same age as the subjects. Compositions were evaluated on the basis of words per composition, errors per composition, percentage of errors, words per sentence, lexical sophistication (based on an index used by EFL teachers in Sweden) and individuality, lexical variation and lexical density (percentage of content words). A positive correlation was found between composition length and rating. A negative correlation was found between error occurrence and rating. Native speakers wrote longer sentences and varied sentence length more. They also used more unique vocabulary. These factors affected evaluations. While NWs and NNWs varied in their lexical sophistication, this factor did not affect ratings. NWs and NNWs did not differ significantly in lexical density.

Rivers, W. J. (1987). Story writing: A comparison of native and L2 discourse. In J. P. Lantolf & A. Labarca (Eds.), *Research in second language learning: Focus on the classroom.* Norwood, NJ: Ablex.

Employs a Vygotskian framework to analyze differences between L1 and L2 writing. Narrative compositions were collected from a beginning German class (*n*=unspec) based on pictorial stimuli in both German L2 and English L1. Opening lines of students' L2 texts contain many exophoric references and a lack of connectives compared to other L1 texts. These features are interpreted as writers attempting to gain control over the writing task, to provide verbal labels for the elements of the story for themselves, rather than trying to impart information to an audience. They are said to be externalizing inner speech. Throughout their L2 texts students employed other devices which might serve as external regulations of their texts. For example, they began new paragraphs for every new picture and provided wrap-up comments at the end of frame descriptions. The author concludes that writing is a "self-regulatory" activity, and that students spent most of their energy controlling and organizing the task while spending little time actually communicating a narrative.

Sharma, A. (1979). *Syntactic maturity: Assessing writing proficiency in a second language.* Paper presented at the International Conference on Frontiers in Language

Proficiency and Dominance Testing, Carbondale, IL. (ERIC Document Reproduction Service No. ED 185 105).

Correlates student performance on a sentence-combining task with a standardized proficiency test. Sixty students at three proficiency levels were given a set of 32 single-clause sentences to combine into a paragraph. It was found that students combined more sentences into T-units and wrote longer T-units at more advanced proficiency levels. Error-free T-units and words per error-free T-unit both were predictive of proficiency level as measured by the Michigan Test. Also, relative clause usage decreased as proficiency grew, while preposed adjectives and prepositional phrases increased.

Yau, M. S. (1983). *Syntactic development in the writing of ESL students.* (ERIC Document Reproduction Service No. ED 234 618).

Examines L2 syntactic development as a function of genre and instructional level. Narrative and expository compositions were collected from students (n=60) at three grade levels. Compositions were analyzed for increases in six features: T-unit length, clause length, number of clauses per T-unit, nominals, adverbials, and coordinating vocabulary between T-units. A 3(grade) X 2(mode) factorial design and stepwise discriminant analysis were used to find the features that best discriminate writing across grade levels and between modes. It was found that there were significant increases in all measures by grade level, and that increases were greater in the expository than narrative mode, with the exception of coordinate structures, supporting the notion that coordinate structures are acquired early on by learners. The author concludes that these learners show a remarkable similarity to native writers of English in syntactic development, and hypothesizes that similar cognitive strategies are employed.

3.0 WRITING PROCESS

References in this section document the writing processes of non-native writers. Three subsections contain literature on: attitude towards composing in a non-native language; revision processes of non-native writers; and effect of contextual factors such as computer composing, writing from sources, and differences in topic and genre on non-native writers' text production.

Brooks, E. B. (1985). Case studies of the composing processes of five "unskilled" English-as-a-second-language writers (Doctoral dissertation, New York University, 1985). *Dissertation Abstracts International, 47*, 164A-165A.

Follows up Raimes' study of the writing process of unskilled ESL writers in order to determine what composing behaviors and strategies students exhibit, how their backgrounds influence the composing process, and what their texts show about their writing process. Subjects (n=5) were selected from the researcher's ESL composition course, and participated in four 90-minute sessions which included a variety of writing tasks and post-writing interviews, as well as writing two take-home essays. Students used "reporting-in" protocols. A positive correlation was found between time spent on writing and writing proficiency. More proficient writers re-read and revised more. Less proficient writers tended to view their organization of text formulaically, as an "introduction, body, and conclusion," and relied more on personal experience for content, while more proficient writers made use of a variety of sources. Spoken language proficiency and length of time in the U.S. were not associated with written language proficiency. Previous writing and reading experience in L1 resulted in increased competence in L2 writing. The researcher hypothesizes that there are developmental stages in ESL writing.

Brooks, E. (1989). *Interviews with students and colleagues: What can we learn?* (ERIC Document Reproduction Service No. ED 314 958).

Follows up an earlier study exploring the composing processes of "unskilled" ESL college writers. Six out of the original 14 participants were contacted three years after the original study. In the first session, subjects wrote a composition based on an article, and were interviewed after writing about their composing processes. In a second session, students were interviewed about the types of writing they had been doing in coursework, how they perceived their development as writers, and how they had written a course paper they had written recently. Following student interviews, instructors for whom students had written course papers were contacted and interviewed about their perceptions of the writers and texts. Students reported writing at least two drafts of course papers. They had sought no outside help from professors, tutors, or the Writing Center. Course papers varied considerably in length and purpose, but all expected students to react to a text. Some allowed students to respond personally, while others forced students to deal only with the given text. Students had mixed success dealing only with the text. Most instructors were found to focus on content and organization of texts, and did not pay attention to language unless it hindered communication. They did not meet in individual conferences with students about papers, or allow for revision. All students retained some surface language errors in their work. Writers identified as more skilled in the earlier study had continued to use many constructive composing strategies, although differences between writers in composing skills were less evident in the follow-up.

Cumming, A. (1990). Metalinguistic and ideational thinking in second language composing. *Written Communication, 7*(4), 482-511.

Examines how L2 writers manage points in the writing process in which they simultaneously consider target language use and the gist of their message. Two think-aloud writing protocols each were collected from 23 subjects at three levels of native language writing expertise and two levels of second language proficiency. Resulting protocols were coded for all decisions made about writing, and decisions were categorized according to gist, language use, discourse organization, or procedures for writing. An average of 1/3 of subjects' decisions addressed gist and second language use concurrently. Subjects with greater writing expertise tended to spend a larger proportion of decisions considering language use and gist in conjunction, and all subjects spent more time on these decisions during the argument task than during the letter task. Most of these decision episodes involved selecting the appropriate wording to express an idea in the second language, or trying to find a second language equivalent of a word or phrase in the first language. Subjects also reasoned about the appropriateness or correctness of syntactic or morphological forms to the text, although these decisions were infrequent. The author asserts that rather than viewing searches for wording in L2 and cross-linguistic equivalents as an extra burden or problem/constraint for L2 writers, these phenomena can also be seen as a self-prompted means of integrating L1 and L2 knowledge, and gaining greater control over previously acquired knowledge about the L2.

Dennett, J. T. (1990). *ESL technical writing: Process and rhetorical differences*. Paper presented at the Conference on College Composition and Communication, Chicago, IL. (ERIC Document Reproduction Service No. ED 322 713).

Contrasts the technical writing process of native-born American writers, including Japanese Americans, with native-born Japanese writers. Think-aloud protocols were collected from ten subjects for two writing tasks. Writers differed individually in whether they spent the most time on pre-writing, writing, or revision, but these differences were unrelated to cultural background. Subjects who spent the most time on pre-writing produced texts with the greatest lexical cohesion and most cohesive devices per T-unit. Subjects who spent the most time on revision produced texts with the fewest grammatical and spelling errors. Subjects who spent most of their time on the writing phase produced the most words per composition with the least cohesion. English L2 writers produced more text than English L1 writers, but produced fewer words per T-unit and fewer single-word modifiers per T-unit than English L1 writers. While all subjects agreed that the goal of technical writing is to transmit information clearly, the Japanese-born writers also aimed to engage the emotions of the reader. English L1 writers displayed a sense of audience while writing while English L2 writers did not. Native-born English writers also described writing as a tool, and used it as a means of discovery, while none of the non-native writers did so. The author concludes that ESL students should be encouraged to focus on pre-writing.

Galvan, M. (1985). The writing processes of Spanish-speaking bilingual/bicultural graduate students: An ethnographic perspective (Doctoral dissertation, Hofstra University, 1985). *Dissertation Abstracts International, 47*, 481A-482A. (ERIC Document Reproduction Service No. ED 8700449).

Documents the writing process of ten Spanish L1 English L2 graduate students with long residency in the U.S. Data included: a measure of bilingualism; a measure of biculturalism; observations of writing, both in naturalistic environments and in three essay tasks; interviews on subjects' writing; intensive interviews and observations of

two of the subjects; and interviews with professors and employers. It was found that subjects had a distinctive tendency to stop the production and management of discourse rather abruptly for lexical and grammatical reasons. Use of L2 vocabulary was not as automatic or as efficient as in L1, and subjects had developed adaptive strategies to deal with this. Subjects also lacked automaticity or an "ear" for L2 grammatical structure, and avoidance was a common strategy. Stressful situations aggravated these difficulties. Subjects noted that their reading ability was superior to their writing ability. The author suggests that writing as a process is only partially linguistic, and that a writer must also deal with the cultural and cognitive elements of writing.

Goodfellow, P., et al. (1984). *EST: Designing a mini-course for non-native speakers of English in a chemistry lab course*. Paper presented at the Annual Convention of Teachers of English to Speakers of Other Languages, Houston, TX. (ERIC Document Reproduction Service No. ED 274 183).

Examines the language use of L1 and L2 students enrolled in a chemistry class. Subjects were two native and two non-native speakers of English. Data included questionnaires, interviews with subjects and the instructor, observations of lectures, and subjects' lecture notes and lab reports, collected over a nine-week period. It was found that non-native writers tended to record notes as full sentences while native writers used more telegraphic speech. Also, non-native writers tended to copy visual information exactly from the board, while native writers included more verbal explanation. Thus, non-native writers had less information in their notes. However, they did not feel that they had any deficits in their note-taking ability. Non-native writers were found to use the lab manual instructions in writing their reports, although one student was better than the other at making appropriate changes in syntax. Non-native writers tended to use declarative while native writers used more passives and omitted subjects in lab reports. Native writers reduced adjective clauses to phrases more often. Non-native speakers were observed to interact less with other students and the teacher during lab sessions. This probably had a negative effect on their class performance.

Halsall, S. W. (1985). *An ethnographic account of the composing behaviors of five young bilingual children* (Doctoral dissertation, University of Florida, 1985).

Documents ethnographically the writing of five six- to ten-year-old students in an ESL classroom. Data included participant observation, ethnographic interviews of students and teachers, audiotapes, field notes, proficiency test records, lesson plans, writing samples and classroom artifacts related to writing, all collected over a period of four months. It was found that all children engaged in composing behaviors while writing which included invented spelling, copying, body language (e.g. pencil tapping), writing play (e.g., decoration), talking while writing, asking questions and making statements about writing. Other composing behaviors (e.g., confirmation questions) were used by some individuals and not others. It was also found that the teacher used certain composing behaviors consistently with specific children and that these behaviors were highly influential in children's composing processes. It was found that these bilingual children made use of translating speech statements to help them get started in writing. Three composing behaviors were identified that seem to be unique to bilingual children: reviewing writing; confirmation questions; and concealing writing in progress.

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Kelly, P. (1986). How do ESL writers compose? *Australian Review of Applied Linguistics*, *9*(2), 94-119.

Documents the writing process of adult professional L2 writers. Nine subjects, dentists and doctors, were given a think-aloud composing task. Resulting audiotapes, texts and post-composing session interviews form the data. Four of the students spent time pre-planning essays. Instances of verbalized planning activities during the writing were rare. More proficient writers appeared to compose in larger "chunks." Most of the subjects reread their entire essay in the course of writing and used rehearsal of phrases or sentences. Generally, more proficient writers made more revisions. Short pauses tended to coincide with the ends of sentences or semantic "chunks." Longer pauses tended to occur when writers lost their direction or ran out of ideas. Students said that they were thinking in English while composing, although some native language comments were found in the data.

Liebman-Kline, J. (1987). Teaching and researching invention: Using ethnography in ESL writing classes. *English Language Teaching Journal*, *41*(2), 104-111.

Argues for the use of ethnography in studies of ESL composition. Its use is demonstrated in a project to determine the prewriting technique preferences of 48 ESL students enrolled in freshman composition courses, and their relative success with each technique. Students were introduced to three prewriting techniques: 1) open-ended exploratory writing; 2) systematic heuristics; and 3) hierarchical treeing. Observations of students' papers and notebooks, students' stated preferences, and results from a personality preference test (Meyer-Briggs Type Indicator—MBTI) were collected. Hierarchical treeing was found to be the most successful prewriting method. The author hypothesizes that this is because it is more analytical and visual than the other two types of prewriting activities, which are both very demanding in terms of linguistic ability. Also, hierarchical treeing provides students with more structure than the other methods. MBTI testing correlated with these findings. It is suggested that there might be a cultural basis for this preference as well.

Martin-Betancourt, M. E. (1986). The composing processes of Puerto Rican college students of English as a second language (Doctoral dissertation, Fordham University School of Education, 1986). *Dissertation Abstracts International*, *47*, 2577A.

Reviews the composing processes of four intermediate EFL composition students from diverse backgrounds. Subjects were administered Hill's Cognitive Style Preference Inventory, a questionnaire on language background and use, College Board Entrance Examination scores, interviews, and a 50-minute writing task which included and audiotaped verbal protocol. Chi square tests done on the data revealed significant individual differences in composing processes. Two subjects spent approximately the same amount of time in planning, transcribing, and reviewing, while another spent more than half of his time planning and did little reviewing, and the fourth spent twice as much time on transcribing and reviewing as on planning. Subjects also differed significantly in how much Spanish or English they used while composing, and in the part(s) of the composing process they used each language. Subjects were found to have a number of strategies to deal with a lack of English lexical knowledge. Subjects did not differ significantly in cognitive style as measured by the inventory.

Raimes, A. (1985). What unskilled ESL students do as they write: A classroom study of composing. *TESOL Quarterly, 19*(2), 229-258.

Documents the writing process of "unskilled" ESL writers. Eight writers in an ESL college composition course participated. The data included think-aloud protocols, a language proficiency test, holistic scores of essays produced, and responses to a questionnaire. It was found that these subjects, unlike those reported in other studies of L1 and L2 unskilled writers, showed a great deal of commitment to the writing task in terms of time spent on task and amount of text produced. They did not show the same preoccupation with error and superficial editing reported by other researchers. The author concludes that L2 unskilled writers are a less homogenous group than L1 counterparts. Their ability is affected by a number of variables including language proficiency, knowledge of L1 and L2 writing, and writing behavior.

Zamel, V. (1982). Writing: The process of discovering meaning. *TESOL Quarterly, 16*(2), 195-209.

Explores the writing process of eight L2 English college students. Students were interviewed about their writing experiences and behaviors, and their notes and drafts of papers were examined. It was found that class discussion was a valued pre-writing activity for students. While students preferred to write on familiar subjects as beginning second language writers, as they became more proficient they preferred more objective, informationally based assignments. Students asserted that they needed a great deal of time for essays, so that they could leave their papers and come back to them, and for more ideas to come. Most students disliked translation except for specific words or expressions they could not remember in English.

Zamel, V. (1983). The composing processes of advanced ESL students: Six case studies. *TESOL Quarterly, 17*(2), 165-187.

Describes the writing process of six university ESL students. Subjects were given an untimed course-related writing task and observed while they wrote. Their writing was then collected and they were interviewed. It was found that students used a recursive nonlinear process including planning, writing, reading, and revising. Skilled writers were more flexible in how they applied each of these activities, and used strategies to help them pursue the development of ideas while postponing consideration of lexical and syntactic difficulties until the end of the process. In addition, it was found that subjects did not find composing in a non-native language in and of itself problematic, even though they noted individual frustrations and difficulties with language.

3.1 Relationship to attitude

Betancourt, F., & Phinney, M. (1987). *Sources of writing block in bilingual writers.* (ERIC Document Reproduction Service No. ED 281 361).

Applies Rose's (1984) work on writing apprehension to bilingual writers. Three groups of students (n=20 each), one consisting of students in a Spanish composition course, one of beginning English composition students, and one of graduate students in English education, were given a 24-item questionnaire on writer's block based on Rose (1984). Results showed that writing apprehension had different sources in the three groups. The Spanish composition course group, writing in their native language (Spanish), had higher anxiety levels overall. The authors contend that this is the result of previous instruction. Beginning second language writers had the most problems with premature editing, or focusing too much on the sentence level, while experienced

writers didn't find this problematic. Complexity of material was an equal problem for all groups. Results indicate that sources of writing apprehension in bilinguals vary by the language used and how experienced students are with writing in that language.

Fayer, J. M. (1986). *Writing apprehension among Puerto Rican university students.* Paper presented at the Annual Meeting of the Speech Communication Association, Chicago, IL. (ERIC Document Reproduction Service No. ED 280 283).

Explores writing anxiety among bilingual writers. Students enrolled in English (L2) writing courses (n=96) and students enrolled in English-medium (L2) courses where writing was not the focus of instruction (n=81) were given the 26-item Daly & Miller survey on writing anxiety, for both Spanish and English. Writing apprehension was found to be higher in English (L2). Students also rated their writing proficiency lower in L2. However, those in writing classes were less apprehensive. Females showed more anxiety writing in a second language than did males, but had a lower anxiety level overall. Apprehension was lower for writing than speaking a second language. The author attributes this to cultural and instructional factors.

Gungle, B. W., & Taylor, V. (1989). Writing apprehension and second language writers. In D. M. Johnson & D. H. Roen (Eds.), *Richness in writing: Empowering ESL students* (pp. 235-248). New York: Longman, Inc.

Describes two studies undertaken on writing apprehension among ESL college writers. In the first study, 200 students enrolled in three levels of ESL composition courses were given an ESL version of the Daly-Miller Writing Apprehension Test (1975). Consequently, four students identified as having a high level of writing anxiety were given another questionnaire. No relationship was found between class level and writing apprehension. There was a small but significant trend for students reporting high writing apprehension to report that their majors demanded little in writing requirements, and these students were also less likely to indicate that they were interested in enrolling in advanced writing classes. In the second study, 73 students enrolled in four levels of ESL composition courses were given a revised version of the same attitude survey. Again, no relationship was found between class level and writing apprehension. A small but significant relationship was found between a concern with content and ideas when writing and a concern with grammar and form. Again, students who reported that their major required writing were most willing to take advanced writing courses. In general, the authors conclude that the writing apprehension survey may not prove useful for classroom use, and speculate that the concerns that ESL writers have about writing may be different than those of L1 writers.

Jones, S. (1985). Problems with monitor use in second language composing. In M. Rose (Ed.), *When a writer can't write.* New York, NY: Guilford Press.

Uses Krashen's monitor theory of second language acquisition to consider how over- or underuse of the Monitor will manifest itself during the composing process. Two case studies selected from a larger sample group of nine are detailed, one of an overuser and one of an underuser. Three composing sessions were videotaped, and subjects were then interviewed. Each pause and revision were recorded and then connection to the text noted. Patterns of pause length were found to be similar to those reported for native speakers, subjects paused longer at T-unit boundaries than within T-units, and pauses at paragraph boundaries were longer still. Also, genre type influenced the length of pauses. The monitor overuser paused more frequently and paused for longer intervals than the monitor underuser. Furthermore, the overuser tended to consider text complete when it was written down, and seldom revised or reread. The underuser, on

the other hand, reread and revised frequently. The underuser showed evidence of false starts and trying out various lexical items while the overuser almost never did. The author suggests that monitoring does not lead to improved writing and makes writing more time-consuming.

3.2 Revision

Cohen, A. D. (1987). Student processing of feedback on their compositions. In A. Wenden & J. Rubin (Eds.), *Learner strategies in language learning*. Englewood Cliffs, NJ: Prentice/Hall International.

Reports on the sorts of feedback students receive from teachers on L2 compositions, and how students respond to feedback. Research on revision in L1 and L2 has tended to focus on how teachers mark papers more than on how students respond to feedback. A survey of 217 students enrolled in English (L1), French, German, and Hebrew (L2) courses was done to determine the form and substance of teacher feedback on students' compositions, and the way students employed the feedback. The majority of respondents (81%) reviewed corrected compositions, and a similar proportion said that they gave "thoughtful attention" to the corrections. The most frequent type of teacher comment reported was single words. Phrases and symbols were also reported. Only 17% of respondents reported feedback in the form of complete sentences. Students reported that teacher feedback dealt most frequently with grammar and mechanics. Vocabulary, organization, and content were dealt with less frequently by teachers, although students reported that they paid considerable attention to these areas. Teacher feedback was not reported to vary significantly according to the level of the class. Students rating themselves as poor writers tended to pay less attention to teacher feedback. With regard to student processing of feedback, by far the largest percentage of students (41%) reported that they made a "mental note" of feedback. Less than 10% of the respondents reported incorporating teacher feedback or comments in rewriting. Almost 20% of the students reported receiving comments that they didn't understand.

Gaskill, W. H. (1986). Revising in Spanish and English as a Second Language: A process-oriented study of composition (Doctoral dissertation, University of California, 1986). *Dissertation Abstracts International, 47*, 3747A-3748A.

Reports on the composing processes of four native speakers of Spanish writing argumentative essays in Spanish L1 and English L2. Data included: two essays, one in English and one in Spanish, each written during two 90-minute videotaped sessions; all drafts of essays; an English proficiency test; a questionnaire to subjects and one to instructors; and holistic ratings of compositions. Faigley and Witte's (1981) taxonomy was used to classify revisions in the texts. It was found that there was a strong similarity between the percentages of revisions on Spanish and English essays for each writer. Also, many revisions were made during writing rather than between drafts. For all writers and essays, the majority of revisions were surface changes. Meaning and organization were seldom altered. There were not many distinct differences in revisions corresponding to proficiency levels. However, proficiency level differences were more evident in writers' planning process, reading ability, and overall fluency.

Hall, C. (1990). Managing the complexity of revising across languages. *TESOL Quarterly, 24*(1), 43-60.

Examines how proficient non-native writers revise in their native and target languages. Four advanced ESL writers, as judged by holistic composition ratings and instructor judgments, were given four argumentative writing tasks, two in subjects' native

languages and two in the target language, English. Subjects wrote in two 90-minute sessions for each writing task, in which they produced an initial and final draft. Resulting texts were coded by two coders for: 1) stage of revision in which the revision took place; 2) level of revision (e.g., word, sentence, paragraph); 3) type of revision (e.g., addition, deletion, substitution); and 4) purpose of revision (informational, grammatical/mechanical, or cosmetic). Subjects were found to write more in L1 texts, pause less while writing, and make almost half as many revisions when writing in L1 than L2. Subjects tended to revise most at the word level in both languages, and second most at the phrase level. Substitution was the most frequent type of revision in both languages. However, the second most frequent type of revision was addition in L1 and deletion in L2, one of the few significant differences found between L1 and L2 revising processes. Informational revisions were more numerous than grammatical or cosmetic revision in both L1 and L2. Many revisions did not affect the basic meaning of a sentence but paraphrased it. Grammatical/mechanical revisions were also substantial in both languages, although the L1 revisions dealt primarily with spelling, while L2 revisions tended to be grammatical in nature. Over half of the revisions in both languages occurred during the actual drafting of texts, as opposed to pre-drafting and between-draft stages. While none of the writers made pre-draft plans or notes in L1, three of the four did in L2. However, these plans were seldom referred to during the actual writing process, and seemed to function more as rehearsals for writing.

Lai, P. C. (1986). The revision processes of first-year students at the National University of Singapore. *RELC Journal, 17*(1), 71-84.

Analyzes revisions made in the texts of L2 writers of English. Original drafts from non-native English writers (n=82) were collected along with second, and in some cases, third drafts in order to examine the revising process. Students were also asked to complete two sentences about their revising processes as well. Revisions were tabulated and categorized according to Faigley and Witte's taxonomy. It was found that there was a substantial range in number of revisions made per individual. Almost 80% of the revisions were formal (mechanical) or otherwise preserved the original meaning. Overall, there was a tendency for students to make more text-based changes than surface changes in their second and third drafts. Students also tended to make more revisions at higher rather than lower syntactic levels (e.g., phrase rather than word) in second and third drafts. In two survey questions to the group, 96% described their revision process as checking for error.

Radecki, P., & Swales, J. (1985). ESL student reaction and response to feedback on their written work. *Papers in Applied Linguistics, 1*(2), 70-89.

Surveys (n=59) and interviews (n=8) ESL students about their preferences and expectations for teacher feedback on writing. It was found that all students had neutral or positive reactions to heavily marked papers. They tended to look first at grades on papers. Students reported reviewing their work only once or twice upon receiving it or before a test. Based on differences in student responses, they were divided into three groups. "Receptors" preferred substantive teacher comments, marking of all linguistic errors, joint responsibility between student and teacher for error correction, and felt an obligation to utilize teacher feedback. At the other extreme, "resistors" preferred short evaluative comments and a grade, correction of only serious errors, teacher responsibility for error correction, minimal or no revision, and were indifferent towards teacher attitude and feedback. Revision was seen by the majority of students as punitive or unnecessary.

3.3 Effect of task and other contextual variables

Benesch, S. (1987). *Word processing in English as a second language: A case study of three non-native college students.* Paper presented at the Annual Meeting of the Conference on College Composition and Communication, Atlanta, GA. (ERIC Document Reproduction Service No. ED 281 383).

Explores the writing process of three ESL case study subjects on a microcomputer. Data included drafts from previous handwritten work, interviews, field notes, students' journals, and videotapes and drafts from three hour per week sessions on the computer collected over the course of a semester. It was found that there were individual differences in how students utilized the computer. One student used it to build fluency, to record ideas rapidly before they get lost. Another student used the computer to revise, employing features such as the thesaurus and spell-check to polish her work. The third student was intimidated by the technology, and used the computer mostly as she would a typewriter. None of the students used the computer for major revisions.

Campbell, C. (1990). Writing with others' words: Using background reading text in academic compositions. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 211-230). Cambridge, England: Cambridge University Press.

Compares the processes by which less proficient ESL writers (n=10), more proficient ESL writers (n=10), and English L1 writers (n=10) incorporate background information into written text. Students were assigned a chapter of an anthropology textbook to read and discuss in class. They were then asked to write in-class compositions on a topic which incorporated the reading material. Compositions were holistically rated by two raters, and instances where the background text had been utilized by writers were categorized according to type, function, location, and type of documentation of incorporated material. All groups used the background information most in the final paragraphs. Non-native writers used significantly more background information in the first paragraph of their texts than did native writers. Non-native writers were more likely to acknowledge the source of material than native writers, although none of the students seemed to have mastered appropriate documentation style. Native speakers received higher holistic scores, and non-natives' uses of background text did not appear as integrated into compositions because the surrounding language was less academic in style and tone.

Chastain, K. (1990). Characteristics of graded and ungraded compositions. *Modern Language Journal, 74*(1), 10-14.

Compares graded and ungraded compositions written by 14 Spanish L2 learners. The results of two three-draft composition assignments, one graded by the instructor and the other ungraded, were collected and analyzed for: 1) total number of words; 2) number of words per sentence; 3) number of simple, complex, complex-compound and compound sentences; 4) ratio of grammatical errors to the total number of words; 5) number of vocabulary errors; 6) number of morphological errors; 7) number of syntactical errors; and 8) grade on content and organization. Students tended to write longer compositions for a grade. Students also wrote longer sentences when writing for a grade, although there was considerable individual variation. Students tended to use more simple sentences in ungraded work, although complex sentences were frequently used in all compositions. There was no significant correlation between the number of errors made and grading, nor any significant correlation between ratings of content and organization and grading.

Chelala, S. I. (1981). *The composing process of two Spanish-speakers and the coherence of their texts: A case study* (Doctoral dissertation, New York University, 1981).

Describes the composing process of two Spanish L1 English L2 writers. Two college-educated subjects with no previous schooling in the U.S. were selected and trained in composing aloud. Four writing sessions of unspecified time limit were conducted with each subject, two each in Spanish and in English, as well as an interview on writing history. Protocols were audiotaped and transcribed, and resulting texts collected. Texts were analyzed using a version of Liever's (1979) functional units and roles, and each f-unit was marked for theme-rheme information. Perle's (1978) categories were used to code audiotapes. Finally, data were integrated in terms of a four-part schema of the composing process—intention, encoding, interpretation, revision, and editing. Past educational and professional experiences were found to influence subjects' approach to writing. One subject was found to be more skilled in planning written expository discourse than the other, although both writers found it difficult to structure argumentative text and avoided taking a stand on issues. The use of Spanish when writing in English was an unsuccessful strategy for both writers, because it led to NL interference errors. Both writers were found to avoid reading complete drafts written in L2, which proved to be an unsuccessful strategy, and resulted in very little revision. However, revision did occur during the writing process, and consisted primarily of inserting concrete examples or connectors.

Chiste, K. B., & O'Shea, J. (1988). Patterns of question selection and writing performance of ESL students. *TESOL Quarterly*, *22*(4), 681-684.

Explores L2 writers' essay topic preferences and their relationship to L2 writing performance. Three hundred and five exams written by L2 English students and 544 written by L1 English students were compared for topic selection. Students were given their choice of four essay questions. ESL students were found to select questions in a different way than native writers of English. They favored the first and second questions over the third and fourth, while native writers' selections were distributed more evenly. ESL writers also favored shorter questions in a set, while native writers preferred the mid-length questions of the set. ESL student question selection was not correlated with success; the pass rate for ESL students who selected longer questions or the third or fourth question in a set was approximately the same as for those who chose shorter questions or one of the first two in a set.

Friedlander, A. (1990). Composing in English: Effects of a first language on writing in English as a second language. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 109-125). Cambridge, England: Cambridge University Press.

Explores circumstances under which first language knowledge might aid second language composing. Students (n=28) were asked to respond to two letters addressed to them. One letter asked students to describe a Chinese festival and compare it to American holidays, and the other asked students to relate difficulties students had had adapting to an American university. For one letter, they were asked to generate a written outline or list of points in their native language, and for the other an outline in English. Students were divided into two groups; half of the students planned in Chinese about the Chinese festival, and in English about American universities, while for the other half planning language and topic were reversed. After generating plans, all letters were written and revised in English. All resulting data were translated into English, and plans and essays were holistically rated on a 1-6 scale. Students planning in Chinese about the Chinese topic and English about the American topic wrote longer

and better essays and produced more details. The amount of time spent on task, however, did not vary by group. Plans written on the Chinese topic, regardless of language written in, were shorter and contained more one-three word cues, but were more highly rated than those on the American topic. When topic was not considered, planning in Chinese resulted in more detailed plans, and plans in English contained more long phrases which appeared in resulting letters. Plans in English and Chinese were of similar length and received similar quality ratings. Overall, students benefitted from planning in the language in which topic knowledge was acquired.

Jacobs, S. (1982). *On learning to write academic essays: Case studies*. Paper presented at the Annual Convention of Teachers of English to Speakers of Other Languages, Honolulu, HI. (ERIC Document Reproduction Service No. ED 223 101).

Compares the scientific writing skills of a L1 and a L2 student enrolled in a biology course. Both students failed to show adequately the connections between ideas in relationships such as exemplification, causation, comparison, and generalization. Their writing tended to follow an informational pattern which the author believes reflects the order in which they memorized the information.

Johns, A. M., & Mayes, P. (1990). An analysis of summary protocols of university ESL students. *Applied Linguistics, 11*(3), 253-271.

Compares summaries written by high-proficiency (n=40) and low-proficiency (n=40) learners. Students were given a 588-word text and asked to summarize it in 85-115 words. Resulting texts were analyzed by two raters for correct replications and distortions of the "gist" of the original text using a protocol analysis scheme. While low proficiency students more frequently copied directly from the original text than high proficiency students, groups did not differ significantly in how much paraphrased material they took from the text. Proficient writers were more likely to combine ideas from several sentences in the original text, although neither group combined sentences taken from different paragraphs of the original text very frequently. Neither group was found to use many "macro-propositions," restating the main idea of a portion of the text, and both groups were similar in how often they produced summaries which distorted or were not true to the original.

Johnson, P. (1986). Acquisition of schema for comprehension and communication: A study for the reading-writing relationship in ESL. *RELC Journal, 71*(1), 1-13.

Argues, based on schema theory, that ESL students who are unfamiliar with the predominantly western expository genre can benefit from transfer if they are presented with the same information in narrative, a universal genre, as well. To test this hypothesis, two groups of ESL students, one consisting of students (n=15) who were newly arrived in the U.S. and who had demonstrated problems in writing expository prose in English, and the other consisting of students (n=20) who had studied in the United States previously and taken writing courses, were given two tasks two weeks apart. In the first task, students were given an expository passage to read and then recount in writing. Two weeks later, they were given a narrative passage to read and recount and then given an expository passage containing essentially the same story grammar elements to read and recount. It was found that inexperienced ESL writers recalled more in the narrative and expository condition, while more experienced writers' performance was essentially the same under both conditions. The author concludes that some "schema accommodation" where narrative genre is adapted and changed to fit a new expository genre did take place in the inexperienced writers. However, the inexperienced writers primarily employed "schema assimilation," where

expository material was adapted to fit narrative schema. The study lacks control for practice effects and assumption that college level international students have not been previously exposed to expository genre.

Kroll, B. (1990). What does time buy? ESL student performance on home versus class compositions. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 140-154). Cambridge, England: Cambridge University Press.

Investigates the effects of writing at home or in class on composition quality. A group of 25 students enrolled in ESL composition courses each wrote two in-class essays and two take-home essays with 10-14 days of preparation time. Each essay was examined for error frequency and examined holistically for organization and coherence. While students made fewer errors on the average at home than in class, correlations showed that the pattern of errors students made were the same in class and at home, and the difference was not statistically significant. Essays written at home tended to receive higher holistic evaluations than those written in class, although the difference was not statistically significant. No significant relationship was found between essay error rates and holistic evaluations.

Leonhardt, N. L. (1985). *Effects of assigned versus open topics on the writing scores of university-level non-native English speakers* (Doctoral dissertation, Florida State University, 1985).

Examines the effect of topic on writing quality. Ninety-eight ESL students were randomly assigned to two groups; in one group students were assigned a writing topic, and in the other group students were free to choose their own topic. Compositions were rated holistically, based on five subscores; content, organization, vocabulary, language use, and mechanics. Forty of the forty-eight students in the open topic condition chose to write narrative or descriptive compositions. Pearson product-moment correlations between TOEFL scores and topic groups showed no significant difference in average language proficiency between the two groups. Furthermore, correlations revealed no significant relationship between topic groups and composition scores, either on subscores or the composite.

Li, K. N. Y. (1990). *Writing with pen or computer? A study on ESL secondary school learners.* Paper presented at the Annual World Conference on Computers in Education, Sydney, Australia. (ERIC Document Reproduction Service No. ED 322 720).

Investigates whether there were any significant differences between non-native writers using computers or using pen and paper in composition quality and quantity. Subjects were 40 eighth-grade students enrolled in a Anglo-Chinese school in Hong Kong. Over the course of five months, the researcher held 10 writing sessions. In each 80-minute session, the researcher spent 30 minutes discussing how to write the essay with the class, and gave a guided writing sheet to students. The class was then randomly divided into two groups. The control group remained in the classroom to write while the experimental group wrote in a computer lab. The computer group was given specific opportunities at lunch and after school to revise, and the hand-written composition group was also encouraged to revise their essays before handing them in. Resulting hand-written compositions (n=196) were typed into the computer and, together with the computer-written essays (n=197), were printed and holistically rated by two raters on a scale of 1 to 5. Students were also given an attitude survey before and after the experiment. Overall, computer-written essays received significantly higher quality ratings, although when results were analyzed essay by essay, significant differences were found on only two of the 10 essays. Computer-written compositions

were also significantly longer than those written by hand, although again when results were analyzed essay by essay, significant differences were found on only three of the 10 essays. All subjects showed significantly more confidence about writing after the experiment, although they did not find writing compositions easy in L2, or enjoyable in either L1 or L2.

Peyton, J. K., et al. (1990). The influence of writing task on ESL students' written production. *Research in the Teaching of English*, *24*(2), 142-171.

Compares the writing of sixth-grade students (n=12) on assigned-topic writing tasks to writing in dialogue journals. Data included five journal entries, two teacher-assigned texts (a thank-you letter to another teacher and a compare/contrast essay), and a text written as part of a state assessment measure (a persuasive letter to a friend) for each subject. Students were found to write more per day in journals than they did per writing assignment, even though journals were done outside of class time. Students wrote the most clauses per T-unit in the persuasive letter to a friend, and the fewest in the compare/contrast essay. Students exhibited the most variety in clause connectors used in dialogue journals and the least variety in the compare/contrast essay. These findings are contrary to expectations that more complex syntax would occur in the planned, formal essay than in the informal dialogue journals. No overall difference was found between texts in cohesive devices employed, although students used the fewest repetition ties in journals and letters to a friend. Overall, when the writing task was less closely tied to personal experience and knowledge, students appeared to have found it more difficult and their writing was less complex or elaborate. The authors note that differences in performance by task show that a single sample of text is not an adequate measure of a student's writing ability.

Reid, J. (1990). Responding to different topic types: A quantitative analysis from a contrastive rhetoric perspective. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 191-210). Cambridge, England: Cambridge University Press.

Explores the effect of topic on compositions. Seven hundred sixty-eight compositions written on compare/contrast (n=382) and graph description (n=386) topics were selected from a larger corpus produced from English L2 TOEFL test takers (n=540) and English L1 American university students (n=228). Subjects wrote significantly longer essays on the descriptive topics than compare/contrast topics. In terms of syntax (average sentence length, percentage of short sentence, percentage of complex sentences, and percentage of passive voice verbs), essays written on descriptive topics were not significantly different than those written on compare/contrast topics. This finding contradicts expectations that different genres might produce different syntactic patterns. Subjects employed fewer pronouns in compare/contrast topics than in descriptive topics, contradicting the notion that pronoun use is linked to informal, interactional discourse. Lexical choice proved to be significantly different for topic types. The descriptive tasks produced significantly longer words, indicating that more formal, informational responses were given than for the compare/contrast topics. However, analysis by language background showed this trend to be significant only for English L1 writers. Writers used significantly more content words in the compare/contrast topics than in the descriptive topics, perhaps signalling a less formal discourse style. Arabic L1 and Chinese L1 writers used significantly more passive-voice constructions in compare/contrast essays than in descriptive essays.

Seidlhofer, B. (1990). *Summary judgements: Perspectives on reading and writing*. Paper presented at the Annual Meeting of the International Association of Teachers of English

as a Foreign Language, Dublin, Ireland. (ERIC Document Reproduction Service No. ED 321 571).

Documents how differences in "schematic-priming," or the contextual clues given in a text, affect summaries written by non-native writers. Forty-three third-year Austrian university students of English (L2) were split into two groups. Group A was asked to write a 60-word summary of a 1000-word article as it appeared in *Time* magazine. Group B was given the same task, but the article was typed out without the title, subtitles, columns, or illustrations. Group A subjects who had the original copy of the article tended to retain the original title while Group B subjects had to devise their own titles. Students in Group A tended to follow the sequence of propositions from the original and put them together in coordinated, list-like structures, while Group B students reordered some propositions from the original text and employed more subordination. Group A students provided little explication in their summaries, while Group B did (for example, "reasons range from ...," "the fact originates in ...") While Group A students seldom expressed themselves in their own words, Group B students did so frequently. Thus, providing the original format for the text constrained the summarizing performance of Group A students, while Group B students did more reconceptualization of the text.

Sinclair, V. E. (1983). *Mode and topic effects on complexity in adult ESL compositions* (TEAL Occasional Paper No. 7). Vancouver, BC: Teachers of English as an Additional Language.

Relates syntactic features in L2 writers' texts to text genre and holistic composition ratings. Thirty-four ESL students wrote on six different topics over a six-week period. Each resulting composition was evaluated by three instructors, and words per T-unit were calculated. Mean T-unit length was greatest in expository genre, followed by argumentative and descriptive genres. Narration had the lowest average T-unit length. A considerable difference was found in individual subjects in mean T-unit length within genres (subjects wrote on two topics in narrative and descriptive genres). Overall, correlations between composition ratings and T-unit length were significant but low (r=0.287).

Siu, K. P. (1986). *The effects of mode on syntactic and rhetorical complexity for EFL students at three grade levels.* (ERIC Document Reproduction Service No. ED 274 163).

Examines the effect of genre on the syntactic features in L2 texts. Narrative and argumentative compositions were written by 40 Form Four and 40 Form Six (secondary) EFL students, and 40 university-level English major EFL students. It was found that all students used longer T-units, longer clauses, and more clauses per T-unit in the argumentative mode. However, only the college-level students used more subordinate clauses in the argumentative mode than in narrative.

Swales, J. (1990). Nonnative speaker graduate engineering students and their introductions: Global coherence and local management. In U. Connor & A. M. Johns (Eds.), *Coherence in writing: Research and pedagogical perspectives* (pp. 187-207). Alexandria, VA: Teachers of English to Speakers of Other Languages.

Documents characteristics of scientific paper introductions written by graduate students writing in English L2. Introductions to research papers were collected from 17 students in an ESL technical writing course. Most of the introductions followed a four-part formula provided by the instructor. Despite surface-level problems with

grammatical errors, lexical choice, sentence construction, and stylistic appropriateness, most of the introductions were clearly recognizable and interpretable as scientific paper introductions. Difficulties in interpreting two of the introductions were attributed to their macrostructure not being easily identifiable by readers. Several students deviated from the formula provided by the instructor because of different conventions in their field. The author asserts that because the genre of scientific writing creates clear reader expectations, non-native scientific writers can compensate for difficulty with semantics and register by adhering to, or even exaggerating, the customary forms that scientific writing takes.

Van Haalen, T. (1990). *Efficacy of word processing as a writing tool for bilingual elementary school students: A pilot study.* (ERIC Document Reproduction Service No. ED 318 233).

Examines computer writing strategies of monolingual and bilingual students from a field sensitivity/independence paradigm. Eight fourth-grade students, four Spanish-English bilingual, and four English monolingual, were asked to write a descriptive paragraph based on a pictorial stimulus. Students received prior instruction on the computer. The students' teacher was asked to rate them on field sensitivity or independence. Students were allowed two one-hour drafting sessions on the computer. Immediately after completing a final draft, a questionnaire based on the Writing Skills Inventory (Padron & Bermudez, 1987) was administered to document students' strategies during the writing process. The first and final drafts of compositions were analyzed for level of revisions made. Compositions were rated on a 1-4 scale by an outside evaluator. Results showed no clear-cut relationship between field sensitivity or field independence and bilingualism. When composing, bilingual students reported using more process strategies (thinking of the audience, choosing the topic, and imitating models of good writing), while monolinguals reported focusing more on product (spelling and neatness). The strategies reported by bilinguals were considered stronger or more effective based on previous research. Bilingual students also performed more revisions between drafts than monolinguals. Most of the revisions were additions or single word changes. Bilingual student compositions were rated more highly overall than those of monolinguals.

4.0 NON-NATIVE WRITING AND OTHER LANGUAGE SKILLS

References in this section examine the relationship between non-native writing ability and reading ability, speaking ability, and native language writing ability.

4.1 Reading/writing relationship

Acuna, D. (1985). English as a second language development: An investigation into the relationship of the students' reading comprehension and writing ability at the college level in Puerto Rico (Doctoral dissertation, New York University, 1985). *Dissertation Abstracts International, 47*, 1201A.

Correlates measures of reading and writing ability in L2. One hundred and forty students in first-, second-, and third-semester ESL courses in Puerto Rico were tested to determine levels of their reading comprehension (as measured by CTBS scores), syntactic maturity in writing (as measured by T-units), and overall writing ability (as measured holistically on a 40-minute composition) at the beginning and end of the semester. It was found that there were significant differences between the three groups. Surprisingly, these variables increased significantly between the first and second semester, but declined slightly in the third semester. Using Krashen's theories, the author hypothesizes that this non-linear development pattern is a result of different stages of second language acquisition including varying levels of hypothesis testing. Data were also analyzed in order to determine if a relationship existed between reading and writing ability. A strong relationship was found.

Carson, J. E., et al. (1990). Reading-writing relationships in first and second language. *TESOL Quarterly, 24*(2), 245-266.

Examines the relationship between reading and writing abilities across L1 and L2. Forty-eight speakers of Chinese L1 and 57 speakers of Japanese L1 were drawn from four American universities. Students were enrolled in intensive English or composition programs. All but three had graduated from high school in their native countries. Subjects had been in the U.S. from one month to 17 years, and varied in educational level achieved, and whether they had completed a higher degree in the U.S. or home country. Students were assigned to three proficiency levels—low-intermediate (TOEFL 420-480), high-intermediate (TOEFL 480-520), and advanced (TOEFL above 525)—based on previous placement information. Subjects were given writing tasks and 325-400 word cloze reading passages in both L1 and L2. Resulting texts were scored by two raters on a six-point scale. Inter-rater reliability varied from .73 (English L2) to .91 (Japanese L1). Cloze passages were scored using exact-word scoring. Correlations between L1 and L2 performance on reading and writing tasks were weak (.23) to moderate (.51). Reading scores were more highly correlated than writing scores, with L1 and L2 writing correspondence insignificant for Chinese subjects. There was a trend (although not significant) for L1 reading and writing scores to decrease as L2 proficiency scores increased, indicating language loss. Multiple-regression analysis revealed different relationships between L1 and L2 educational experience and task performance for the Chinese and Japanese-speaking groups.

Cumming, A., et al. (1989). *Reading and summarizing challenging texts in first and second languages.* Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA. (ERIC Document Reproduction Service No. ED 306 773).

Compares the L1 and L2 performance of 14 Anglophone learners of French on reading and summarizing tasks. Students were all enrolled in beginning or intermediate French courses at a Canadian university. Questionnaires and interviews established that three subjects had professional writing experience, four were considered basic writers, and seven were average students without any particular expertise or deficiencies. Subjects were trained in think-aloud protocols. They were then asked to read two six-page newspaper articles, one in English L1, and one in French L2, and summarize each in the same language. Resulting protocols were coded for decision-making behaviors, including: 1) no problem-solving; 2) problem identification without efforts at resolution; 3) rapid decisions without strategy use; and 4) problem-solving strategies using heuristic searches such as generating and assessing alternatives. Individuals' use of problem-solving strategies was similar across first and second language performance. Use of problem-solving strategies correlated with individuals' levels of writing expertise in L1, but not with level of L2 proficiency. Basic writers tended to identify problems, but not evaluate them further. Average writers tended to make rapid decisions without reported strategy use. Most of the thinking reported was in English L1. Reading appeared to proceed in ways similar to those described in the model developed by van Dijk and Kintsch (1983). A great deal of time was devoted to interpreting individual phrases or sentences, and the meaning of unfamiliar words. Basic writers tended to focus mainly at the word and sentence level in their reading and writing, seldom displaying an effort to construct an overall meaning for the text, while more expert writers tended to integrate information while reading and writing, and aimed for a holistic understanding, or "situational representation" of the texts.

Hague, S. A. (1984). *An assessment of the reading achievement of secondary students and its relationship to the readability levels of student generated writing in English and in Spanish.* (ERIC Document Reproduction Service No. ED 263 533).

Correlates the readability of L1 and L2 writing samples with a measure of reading ability. Twenty-one English L1 students enrolled in an advanced-level Spanish class participated in the study. They took a standardized reading test, and three random samples of a hundred words were taken from each of their English and Spanish class compositions, and analyzed according to Frye readability graphs. A moderate positive correlation was found between the comprehension and vocabulary sections of the reading test and both the English and Spanish test readability scores. No correlation was found with the decoding or rate sections of the reading test, however. It was found that English and Spanish writing abilities were rated poorer than English reading ability according to grade level norms. English and Spanish writing ability were highly correlated, although Spanish writing ability was significantly poorer on the average.

Pimsarn, P. (1986). The reading and writing relationship: A correlational study of English-as-a-Second-Language learners at the collegiate level (Doctoral dissertation, North Texas State University, 1986). *Dissertation Abstracts International, 47,* 2974A.

Correlates writing and reading ability with a self-report survey of language background and use. The survey included questions on preference for reading materials, reading ability, length of residence in the U.S., previous experience with English instruction, and writing ability. Forty ESL students were given a questionnaire, a test of reading ability (Nelson-Denny Reading Test Form A), and a timed compare/contrast writing

task. It was found that there was significant correlation between reading and writing ability levels. No relationship was found between reading/writing ability and the other variables, although the survey format somewhat limited possible responses.

4.2 Speaking/writing relationship

Abraham, R. G. (1981). *The relationship of cognitive style to the use of grammatical rules by Spanish-speaking ESL students in editing written English* (Doctoral dissertation, University of Illinois, Champaign-Urbana, 1981).

Forty Spanish speakers were selected based on their performance on the use of verbal third person singular *-s* in a spoken language task. Subjects were considered to be in the early part of Corder's (1973) "postsystematic" error stage, in which errors are still made but are easily self-corrected. Subjects, who had an error rate over 25%, were given four tasks: spoken and written elicitation tasks based on pictorial stimuli; a fill-in-the-blank task, and a proof-reading task. Several measures of cognitive style and an attitude survey on language correctness were also administered. Correlative and multiple regression analyses were applied to the data. Subjects were found to have a higher degree of correctness in writing than in speaking. Field independence was positively correlated with written tasks. Impulsivity was negatively correlated with proof-reading performance. Preference for processing information through the written word was negatively correlated with performance on the composition task. Attitude towards correctness was not significantly related to performance on the written tasks. Greater accuracy in written than in spoken tasks confirms the role of monitoring hypothesized by Krashen, Bialystock, and McLaughlin. The author suggests several ways in which instruction might help field dependent students to monitor better.

Atari, O. (1984). *Oral style strategies in EFL written discourse: Implications for teaching college composition.* Paper presented at the Third Annual Linguistics Conference, Irbid, Jordan. (ERIC Document Reproduction Service No. ED 271 006).

Suggests that spoken register features and Koranic text features influence the writing of Arabic-speaking students in L2 English. Fifteen essays written by college sophomores enrolled in an English course on a topic based on course reading were examined for the use of spoken and written language features. It was found that some essays exhibited a lack of cohesive ties between propositions, which Chafe has identified as a property of spoken language. Also, essays frequently began with global statements irrelevant to the main thesis of the text. Students also made extensive use of demonstratives and other elements (e.g., "sort of," "and so on") which normally would depend on context for interpretation. Coordinated parallel structures were common, rather than subordinate constructions more characteristic of proficient writers of English. Often, students repeated the main point rather than elaborating on or explaining it, a feature which has been attributed to Koranic texts. Also, students used narrative, concentrating on actions and activities to elaborate and illustrate a point rather than a more abstract analysis.

Florez, V., & Hadaway, N. L. (1987). *Relationship of oral language proficiency and writing behaviors of secondary second-language learners.* Paper presented at the Southwest Regional Conference of the International Reading Association, Phoenix, AZ. (ERIC Document Reproduction Service No. ED 283 359).

Documents writing skills of eleven students in a multi-level ESL class. Sixty writing samples were collected over a two-month period, in both native and target language. All compositions were found to be lacking in descriptive and informational detail; the

authors take this as an indication of limited vocabulary. Most students displayed an ability to organize sentences into a paragraph, but some had difficulty with introductions and conclusions. Some students demonstrated parallel abilities in L1 and L2 composition, while others had unequal competence. LAS oral proficiency test scores were not found to correlate with assessments of writing ability.

Vann, R. J. (1980). Oral and written syntactic relationships in second language learning. In C. A. Yorio & J. Schachter (Eds.), *On TESOL '79: The learner in focus.* Washington, DC: Teachers of English to Speakers of Other Languages.

Correlates syntactic features with a measure of L2 proficiency. Twenty-eight ESL students were asked to watch a 12-minute silent film, and then write a composition about the story and tell it to an interviewer (order of tasks was varied). T-units, "mazes" (words or string of words which do not constitute T-units), ratio of dependent clauses, and error-free T-units in the resulting texts were holistically rated as high, medium, or low proficiency by trained ESL teachers. The order of writing and speaking tasks appeared to have no effect on task performance. Each subject's oral and written texts tended to be rated in the same category. Number of mazes, error-free T-unit length, and percentage of error-free T-units were similar in each subject's written and oral texts. However, mean T-unit length and ratio of dependent clauses were not found to correlate. A step-wise multiple regression analysis of syntactic indices and TOEFL scores showed that error-free T-unit length in writing had the strongest relationship with TOEFL scores, and mean length of T-unit plus ratio of error-free T-units in speaking were most strongly related. Subjects produced much more language in speaking than writing. Mazes were plentiful in speaking and rare in writing. T-units and error-free T-units were longer in writing than speaking. These results parallel findings with L1 subjects.

Wald, B. (1987). The development of writing skills among Hispanic high school students. In S. R. Goldman & H. T. Trueba (Eds.), *Becoming literate in English as a second language.* Norwood, NJ: Ablex.

Compares the literacy skills of nine early learners of English (first grade or earlier) and seven late learners of English (junior high or later). In addition, data in Spanish but not English were collected from three late learners who had been in the U. S. for less than one year. Spoken and written narrative and descriptive texts were elicited from each subject. All subjects were found to employ more complex syntax in writing than in speaking regardless of degree of experience with English, suggesting that the norm of greater syntactic complexity in writing transfers from one language to another. All subjects were found to use fewer pronouns and more nouns in subject position in writing. Late learners used more pronominal forms in speaking and fewer pronominal forms in writing than did early learners. Inversion (e.g., "To the left is the living room") was used equally in speech and writing by early learners, while late learners used it much more frequently in writing than in speech. Thus, late learners seem to differentiate more between syntactic constructions employed in speech and writing than early learners. Late learners are influenced by English conventional spellings in their invented spelling (e.g., "nifht" for "knife" based on "night"). Both early and late learners make spelling mistakes in which conventional words other than the ones intended are used (e.g., "them" for "then"). However, errors made by late learners are likely to be phonologically closer to the intended word than those made by early learners, suggesting that late learners are attentive to phonological features of texts.

4.3 Relationship to NL writing ability

Canale, M., Belanger, M., & Frenette, N. (1982). Analyse préliminaire de l'interaction L1-L2 a l'écrit. In G. Alvarez, D. Huot, & R. Shein (Eds.), *Interaction L1-L2 et strategies d'apprentissage: Actes du 2e colloque sur la didactique des langues.* Quebec: Centre international de recherche sur le bilingualisme.

Evaluates Cummins' hypotheses regarding context-reduced, cognitively demanding language skills and common underlying proficiency (CUP) through composition data. It is noted that Cummins has based his notions largely on measures of oral and written language comprehension, and to a lesser extent, spoken production. This study therefore seeks to find out how well writing skills in L1 relate to those in L2. The CUP hypothesis predicts that they will be closely related. Three hundred and four compositions in French L2 and 335 in English L1 were collected from ninth- and tenth-grade French-schooled Anglophone students at four schools, and a subsample of compositions by 106 students were selected for analysis. Two raters gave each composition a rating of 1-10, and ratings were averaged. Composition scores indicated major differences between the four schools sampled in terms of writing skills in French and English. Correlations between English and French composition scores for each school were weak or insignificant. These results do not confirm Cummins' CUP hypothesis. However, the authors discuss several extraneous variables that may have affected results, including differences in the concentrations of Francophones in each school community.

Canale, M., Frenette, N., & Belanger, M. (1988). Evaluation of minority student writing in first and second languages. In J. Fine (Ed.), *Second language discourse: A textbook of current research* (pp. 147-165). Norwood, NJ: Ablex Publishing Corporation.

Examines the extent to which strengths and weaknesses in L1 writing are reflected in L2. The authors frame their work in terms of Cummins' theories of language interdependence, cognitive demand, and context-embeddedness of language. They note that measures of written expression have not been considered in detail in this work. Two pilot studies were conducted. In the first study, narratives written in French L1 and English L2 by ninth- and tenth-grade students (n=106) enrolled in French medium schools were holistically evaluated and compared. Little evidence for a relationship between L1 and L2 writing was found. In the second pilot study, the compositions of 20 students were randomly selected from the first study sample and a set of 20 analytic scoring criteria were created and tested. For the major study, students (n=32) who each wrote two English and two French narrative and expository compositions were randomly selected from a larger sample collected throughout Ontario. Compositions were evaluated both holistically and analytically. Reliability was found to be greater for the holistic measure. As a group, the subjects were not found to be weaker in one language or genre than the other. There was a wide range in performance by subjects. It was found that although there was a relationship between students' writing in the two languages, the strength of the relationship is heavily influenced by the evaluative instrument used. Also, even though analytic measures indicated a strong relationship between compositions in different languages and genres, each type is distinct in some ways.

Cumming, A. (1989). Writing expertise and second language proficiency. *Language Learning, 39*(1), 81-141.

Explores the relationship between writing expertise and L2 proficiency. Twenty-three subjects were assigned to three writing skills categories based on holistic assessment of

L1 writing. Subjects were also administered an oral English L2 proficiency interview. Each subject did three English writing tasks which were holistically evaluated for content, organization, and language use. Composing protocols were collected and coded for aspect of writing process focused on. A MANOVA analysis showed that higher levels of ESL or writing proficiency was correlated with higher composition ratings. Protocol analysis showed that writers as a whole spent most of their time—74 to 95%—attending to the content or gist of their writing. More skilled writers were much more likely to attend to two aspects of writing simultaneously than less skilled writers. In intermediate writers, ESL proficiency affected the degree to which subjects were able to attend to multiple aspects of writing simultaneously. Thus, ESL proficiency level was a more important factor for average than good or bad writers. More experienced writers evidenced more problem-solving activities while writing and were more able to shift attention between local and global decision-making than basic writers. Overall, writing ability and language proficiency appeared to be complementary but separate factors in L2 writing proficiency.

De Jésus, S. (1982). *The relationship between Spanish and English writing proficiency among college freshmen in Puerto Rico* (Doctoral dissertation, New York University, 1982).

Correlates L2 writing ability with L1 writing ability and other measures. A questionnaire and four 20-minute writing tasks, two in Spanish and two in English, were administered to 344 college freshmen. SAT and high school GPA were also collected. Writing samples were scored by two readers. A moderate correlation was found between Spanish and English composition scores. English writing scores were found to be more highly correlated with SAT scores than with Spanish writing scores. The author asserts that control of syntax as measured by the SAT scores appears to be an important component of writing skill. English writing ability was also found to be correlated to a lesser extent with type of motivation for learning English, type of high school (private or public) attended and exposure to English outside an academic setting. Spanish writing ability was found to be correlated with the College English Examination Board (CEEB) Spanish achievement test scores, SAT verbal scores, and sex.

Doushaq, M. H. (1986). An investigation into stylistic errors of Arab students learning English for academic purposes. *English for Specific Purposes*, *5*(1), 27-39.

Evaluates the L2 writing skills of students enrolled at a Jordanian university. The sample of 96 students included first-year science students who had completed English coursework, second-year English majors, fourth-year English majors, and fourth-year Arabic majors, at a Jordanian university. Data consisted of a composition written in English by the first three groups (n=78) and a composition on the same topic written in Arabic one week later (n=96). Compositions were then graded by two raters each. In general, it was found that students' performance in English and Arabic was poor. This suggests that poor performance in second language composing can be partially attributed to learners' poor mastery of NL writing skills. Skills in organization, paragraph unity, text cohesion, and academic register were found to be particularly lacking. Compositions written in Arabic by fourth-year English majors were judged to be the most coherent. This is considered evidence for positive transfer of composing skills from the second to first language.

Fagan, W. T., & Eagan, R. L. (1990). The writing behavior in French and English of grade three French immersion children. *English Quarterly*, *22*(3-4), 157-168.

Documents the English L1 and French L2 writing processes of third-grade French immersion students (n=12). A research assistant discussed choice of topic and audience awareness prior to writing with each student, and then observed the students while writing, noting the writers' behavior and discussing the reasons for it. Resulting data were coded by two raters. Children were likely to choose topics with which they had first-hand experience or in which they had a special interest, in both L1 and L2. Narrative and description were the preferred genres. Students reported that they did not have any reader in particular in mind as they wrote. Students exhibited a greater awareness of audience in English (L1) writing than in French (L2) writing. Compositions were longer in English than in French, were written in a shorter period of time, and received higher holistic ratings overall (as measured on a 1-5 scale by two raters). Students paused more often when writing in French (L2). Pauses in English were to check something, to change something, to recall information, and to generate new information. Many of the pauses in French were to recall specific needed information, often involving the French equivalent for an English word, suggesting that students were composing in English and transcribing in French. Most of the children reviewed their writing as they wrote, but only a couple reread their entire text when finished. There was more cohesion in English writing than in French writing. Clauses per T-unit were similar in both languages. Children were more likely to make editing changes in their English texts than in French texts. Phonetic spellings were common errors in both languages. There was some influence of French (L2) orthography on English (L1) phonetic spellings.

Jones, S. (1983). Attention to rhetorical information while composing in a second language. In C. Campbell, V. Flashner, T. Hudson, & J. Lubin (Eds.), *Los Angeles Second Language Research Forum Proceedings: Vol. II*. Los Angeles, CA: UCLA, Department of English.

Compares the writing process of a more- and less-skilled L2 writer. Two subjects completed think-aloud composing protocols and Hunt's "Aluminum" rewriting task. One writer was found to be more skilled than the other at several levels. Using Nold & Davis' (1980) analytical scheme, the better writer was found to change levels of abstraction more frequently and to include more identification and evaluation of goals and motivation in her narrative. The better writer's composing process is characterized by a separation between her ideas and their expression in the text. She was therefore able to distance herself from the text and check it against her intent. The less skilled writer, on the other hand, was more focused on the exact form of the text she was producing. Rather than generating ideas first and then planning text to express them, she was dependent on previous text to help her generate the next sentence. The better writer used subordination more frequently and coordination less frequently than the poorer writer. Because the two writers scored similarly on language proficiency tests, the author asserts that the poorer writer did not have previous instruction in writing.

Jones, S., & Tetroe, J. (1987). Composing in a second language. In A. Matsuhashi (Ed.), *Writing in real time: Modeling production processes*. Norwood, NJ: Ablex.

Discusses possible interactions between the writing process and language skills when composing in a second language. The authors describe one in a series of studies they have undertaken on L2 composing focusing on the planning strategies of six learners of English. Subjects each wrote a composition in their NL and two in their TL at two times, three months apart. Think-aloud protocols were collected for the NL in the first

session, and NL and TL protocols in the second. In another session three months later, subjects were supplied with the final sentence of a composition and were asked to write four compositions, two in NL and two in TL for think-aloud protocols. All compositions were rated by at least two trained raters. It was found that writers did transfer planning strategies from L1 to L2. The writers who did the most extensive planning were the most proficient in English and planned in English. Overall, subjects demonstrated very little planning. When the final sentence was supplied, planning strategies changed. The authors assert that students had trouble setting goals of their own and the final sentence provided goal-like constraints which improved their planning process in both L1 and L2.

Luria, A. R. (1977). Differences between disturbance of speech and writing in Russian and in French. *Neurolinguistics, 6*, 118-129.

Hypothesizes that written language functions in a bi- or multilingual individual may be impaired in two different ways. First, conditions which affect the general functioning of the brain will tend to disrupt the language learned later in life while first language functions are preserved. Second, more limited, local damage to the brain can cause impairment in visual, auditory or other sensory perception and synthesis. This damage can affect different languages and language skills differentially. A case study of a multilingual man with impaired brain function is reported. The subject's reading in French and Russian were equally impaired. However, his writing in Russian, which has a phonemic orthography, was unimpaired, while writing in French, formerly his stronger language, was seriously impaired. The author hypothesizes that French requires a large store of conventionalized spellings, and that the subject had damaged the area of his brain which controls visual analysis and synthesis.

McLaughlin, D. (1985). *Literacy in Navajoland: Functions and effects of power*. Paper presented at the Annual Ethnography in Education Research Forum, Philadelphia, PA. (ERIC Document Reproduction Service No. ED 257 324).

Describes spoken and written uses of Navajo and English in a New Mexico rural community. Language use by the community in different contexts was described in detail. Although this community of Navajos did have a vernacular script, most of them were not familiar enough with it to use it for school, business, or government. In most cases the community used Navajo in speech and English in writing.

Staczek, J. J., & Aid, F. M. (1981). *Hortographía himortal: Spelling problems among bilingual students*.

Examines the effects of literacy instruction in L2 on spelling in L1 texts. Spanish writing samples of Spanish L1 English L2 bilinguals attending schools in Dade County, Florida were collected and spelling errors were tallied. Three sources of deviance from standard Spanish orthography were found: intralanguage Spanish spelling, including dialect variation influence; English L2 influence, including the spelling of various vowel and consonant sounds; and errors which are not attributable to either L1 or L2 influence.

Stairs, A. (1990). Questions behind the question of vernacular education: A study in literacy, native language, and English. *English Quarterly, 22*(3-4), 103-124.

Compares Inuktitut (L1) and English (L2) writing skills of native Canadians. Inuktitut (L1) writing samples based on pictorial stimuli were collected from third- and fourth-graders (n=196) who had been educated in Inuktitut from kindergarten through grade

two. Both Inuktitut and English writing samples were collected from approximately half the same students the following year. Inuktitut samples were rated on a 1-3 scale by four raters and analyzed for 1) "expressions per story," roughly corresponding to sentences per story or fluency; 2) "clusters per expression," roughly corresponding to words per sentence; and 3) "chunks per cluster," roughly corresponding to morphemes per word (complexity of word formations is considered a critical index of Inuktitut proficiency). English (L2) samples were rated on a 1-10 scale by four raters. L1 raters changed their criteria for holistic ratings from the first to second year, suggesting that they looked for increasing word complexity rather than fluency as writers matured. Correlations with English L2 performance were small but significant overall (r=.34, p<.001). However, correlations between fluency in L1 and L2 remained stable over time while correlations between English L2 proficiency and word complexity in Inuktitut dropped from positive to negative during the study, suggesting that complexity was being lost in favor of fluency over time, and higher proficiency in English was tied to this pattern. Thus, changes in student writing might be the result of more assimilated or impoverished Inuktitut with the introduction of English L2 rather than more mature Inuktitut proficiency.

5.0 INSTRUCTIONAL FACTORS

References in this section document the effects of instructional context on non-native writing proficiency. References in Section 5.1 include literature on the effects of language medium of schooling, particular courses of study, and teacher style. References in Section 5.2 examine the effects of teacher response on non-native student writing.

5.1 Curriculum and program

Ahrens, C. D. (1985). *Comparing composition skills of native and non-native born students at the junior high school level.* Unpublished master's thesis, University of California, Los Angeles.

Examines L2 composition quality as a function of length of residence in the U.S. Two essays each from junior high school students (n=20) who had resided in the U.S. for less than four years, students (n=20) who had resided in the U.S. for five years or longer, and U.S.-born students (n=20) were compared. Essays were analyzed by holistic rating, error analysis, and T-unit analysis. Holistic ratings and T-unit analysis showed a significant difference between students who had been in the U.S. less than four years and the other two groups. While all groups made frequent errors, non-native writing showed a wider range of error types.

Burger, S. (1989). Content-based ESL in a sheltered psychology course: Input, output and outcomes. *TESL Canada Journal/Revue TESL du Canada*, 6(2), 45-59.

Explores the role of input versus practice in speaking and writing (output) in developing second language skills. Subjects included high intermediate to advanced students (n=16) enrolled in an ESL sheltered psychology course. Ten of the subjects were also enrolled in a concurrent Reading-to-Writing course during the second semester of the course. A comparison group of students (n=17) enrolled in advanced ESL courses was also selected. Students in both programs were pre- and post-tested using the Social Sciences English Proficiency Test. The test included a translation task, an open-ended cloze passage, and a writing task asking students to write to the editor of a newspaper responding to a newspaper article. The writing task was rated on a 1-100 scale by two raters. An ANCOVA test showed no significant difference in achievement between the group enrolled in the sheltered psychology course and the group enrolled in advanced ESL courses. Among students enrolled in the sheltered course, there was no significant difference in overall gains between the students who were enrolled in the supplementary reading and writing course and those who were not. T-tests revealed that students who did not take the reading and writing course showed a significant difference between pre- and post-tests of writing more frequently than students who did take the supplementary course. The author relates these findings to Krashen's (1985) assertion that comprehensible input is enough to ensure improvement in writing, and Swain's (1985) assertion that output is also necessary for improvement.

Castellano, M. (1989). *The literacy experiences of a Chicano student: A case study of Ernesto.* Paper presented at the Conference on College Composition and Communication, Seattle, WA. (ERIC Document Reproduction Service No. ED 320 457).

Examines the early literacy experiences of a bilingual Chicano basic writer. The researcher observed composition classes and tutored the subject for six months. While highly motivated, the student displayed some negative attitudes towards language and literacy use. While the student did not attribute writing difficulties to his bilingualism,

he also did not regard Spanish ability as an asset, and expressed concern about his Spanish L1 interfering with English production. The student also reported avoiding situations which demanded reading or writing. Observations of composing showed a preoccupation with sound-letter correspondences, and anxiety and doubt while composing. Interviews revealed a succession of bad experiences with literacy instruction in elementary school, including being put in an ESL program which the student regarded as remedial and punitive, since he had been educated completely in the United States. The student reported that he learned to avoid reading and writing tasks during elementary school. The author concludes that sensitive teachers are crucial in the early literacy experiences of non-native writers, and that some non-native writers will encounter difficulties or failure when immersed in English-medium classes.

Ferris, M. R., & Politzer, R. L. (1981). Effects of early and delayed second-language acquisition: English composition skills of Spanish-speaking junior high school students. *TESOL Quarterly, 15*(3), 263-274.

Compares the writing skills of L1-educated and L2-educated students in L2. The compositions of two groups of Spanish L1, English L2 students enrolled in the seventh and eighth grade in American schools were examined. One group had been born in Mexico and educated in the L1 at least through the third grade. The other group was American-born and had been educated in the U.S. Compositions written in English based on a 15-minute film were subjected to holistic assessment ratings, error analysis and T-unit analysis. Both groups displayed equal levels of proficiency, except that American-schooled subjects displayed a greater command of verb tense and inflections. In addition, subjects' motivation and academic adjustment was measured through the Multicultural Climate Instrument and course grades. It was found that Mexican-born students were more highly motivated and received higher grades than American-born peers. These findings contradict the idea that children who have had longer exposure to L2 are necessarily more proficient in it than those educated first in L1.

Franklin, E. A. (1984). *A naturalistic study of literacy in bilingual classrooms* (Doctoral dissertation, Indiana University, 1984).

Describes literacy instruction in two first-grade bilingual classrooms, one with a Hispanic teacher and one with an Anglo teacher. Data included: observations and interviews of teachers, students, and other school personnel; samples of texts generated in the school and in classrooms; and audio and videotapes. Teachers were chosen for the study because of their contrasting approaches to literacy instruction. The Hispanic teacher used a sight-word approach to reading, viewed reading as a precursor to writing instruction, and used Spanish in the classroom frequently. The Anglo teacher used a phonics approach to reading, incorporated many writing opportunities into literacy instruction, and used Spanish less frequently in the classroom. Both bilingual programs studied were found to emphasize English literacy, and view Spanish literacy primarily as a means to that end. Both teachers were found to use similar strategies in adapting English literacy instruction for Spanish speakers, including syntactically and lexically simplified questions asking for recall of information, continual review of words and literacy concepts, and tightly structured and sequenced lessons. However, these strategies are actually hypothesized to make literacy acquisition more difficult, because they fail to draw on children's background knowledge about the functions and forms of literacy, and fail to allow children to use literacy as a tool in communication.

Kangas, J. A., & Reichelderfer, N. (1987). *Persistence by successful and nonsuccessful remedial and nonremedial English and English-as-a-Second Language Students: A*

longitudinal study (Research Report No. 65). (ERIC Document Reproduction Service No. ED 289 539).

Traces the effect of reading and writing courses on college persistence of L1 and L2 writers of English. One thousand two hundred sixty-four new students at a college in the U.S. were divided into four conditions. One group took only a course on reading, another group a course on writing, another group both reading and writing, and another group neither reading nor writing. These groups were further divided into native and non-native speakers, and then into remedial and nonremedial students, and then into successful and nonsuccessful students. The persistence of each of these groups in college was then traced. It was found that success in reading and writing courses was one of the most significant factors in persistence, and that students who took both reading and writing persisted at higher rates than those who took one or the other. It was also found that failure in these classes had a greater effect on the persistence of remedial than nonremedial students. However, failure affected ESL students less than native speakers.

Knoll, B. (1979). A survey of the writing needs of foreign and American college freshmen. *English Language Teaching Journal, 33*(3), 219-227.

Surveys past, present, and anticipated writing needs of college students enrolled in L1 and L2 Freshman English courses. International students' (n=35) and native speakers' (n=20) past and present writing demands in English were similar. ESL students found it most difficult to write term papers for classes outside of their area of interest. Most ESL students reported that they took notes in English. Students made similar predictions about writing needs in the future. The author concludes that ESL students need English writing courses, but that courses should consider other forms of writing such as grant proposals and business letters, as well as expository essays.

Liebman-Kline, J. (1986). *Toward a contrastive new rhetoric: A rhetoric of process.* Paper presented at the Annual Meeting of Teachers of English to Speakers of Other Languages, Anaheim, CA. (ERIC Document Reproduction Service No. ED 271 963).

Surveys L2 English writers (n=77) about their previous training in English and in composition. Respondents were enrolled in ESL and composition classes. Results showed that there was a heavy emphasis on grammar instruction in all subjects' home countries. Also, all the subjects (except those from Spain) noted an emphasis on the "introduction/development with support/conclusion" essay style. Instruction in all countries was product-centered rather than process-centered, and revision was reported to be largely sentence-level error correction. Japanese students noted very little direct writing instruction, and said that memorization was a predominant teaching method. Arabic-speaking students reported in-class writing and discussion, but very little revision. Iranian students reported the most in-class discussion and reading of essays, the most letter-writing and the most revising. The author concludes that a great deal of the influence claimed for culture on rhetoric may actually be due to previous training in writing.

Mohan, B. A., & Lo, W. A. (1985). Academic writing and Chinese students: Transfer and developmental factors. *TESOL Quarterly, 19*(3), 515-534.

Argues that one must consider developmental factors as well as cultural transfer when considering second language writers' rhetorical organization. Specifically, they propose that the degree to which organization is stressed in previous schooling will affect students' abilities. The results of surveys of English teachers in British

Columbia and EFL teachers in Hong Kong are compared to show that less emphasis is put on organizational aspects of prose than sentence-level accuracy in Hong Kong. Furthermore, in a survey of Chinese students studying at Canadian colleges (n=30), students expressed more concern about sentence-level accuracy than discourse organization, and most students who claimed they had difficulty organizing compositions attributed their difficulties to a lack of prior training rather than to differences in organizational strategies between English and Chinese.

Ross, S., Robb, T., & Shortreed, I. (1988). First language composition pedagogy in the second language classroom: A reassessment. *RELC Journal, 19*(1), 29-48.

Investigates the efficacy of several instructional techniques in L2 writing classrooms. Subjects were alphabetically assigned to three sections of English composition. In one section, subjects wrote weekly compositions on which the location of errors was marked. Students then revised and checked revisions against teacher corrections. In the second section, students wrote extensive journals. In the third section, students did weekly reformulation or rewriting of student compositions from the previous year, and then received a model reformulation from the instructor for comparison. In addition, half of each class received instruction in sentence-combining, while the other half did fill-in-the blank grammar exercises. Students were tested at the beginning, middle, and end of the course on narrative and expository modes. Resulting compositions were holistically rated, and t-units, percentage of error-free t-units, number of embedded clauses and word counts were tallied. Mode of instruction had no effect on accuracy measures (number and percentage of error-free t-units). Students in the journal section wrote more t-units and clauses per t-unit than other groups on the narrative task. The authors conclude that fluency-building techniques are beneficial, but are of limited value in expository writing instruction. Holistic ratings were found to be unreliable over time on the expository task. However, there was some indication that grammatical instruction groups wrote significantly better final essays than sentence-combining groups. The authors suggest that there might be a threshold level at which sentence-combining instruction becomes effective. Overall, narrative appeared to be easier for students than expository writing, and expository texts contained more embedded clauses.

Swain, M., & Lapkin, S. (1981). *Bilingual education in Ontario: A decade of research.* Toronto: Minister of Education, Ontario.

Discusses two studies of L2 writing ability which are part of extensive research on French language immersion programs in Ontario. Students were primarily native speakers of English who have voluntarily enrolled in the programs. In one study, stories written by third-grade students enrolled in the French immersion and regular English-medium programs were analyzed for vocabulary, knowledge, mechanics, syntactic skills, and creativity. Differences between the immersion and regular program groups were found to be small. In the other study, global assessments of grade five immersion and regular-program student compositions were made by teachers who did not know the students or which program they were in. Compositions were found to be comparable. The authors believe that these studies demonstrate that the English language skills of immersion students are similar to those of monolingual peers.

Ulijn, J. M., & Strother, J. B. (1987). Interlanguage and EST writing: Some syntactic evidence. *English for Specific Purposes, 6*(2), 99-112.

Investigates the effects of academic major on syntactic structures used in writing. Subjects were Dutch (n=48) and American (n=48) humanities and computer science

students writing in English. Ten sentences were selected from a computer science article, and parts of the sentences were deleted. Students were then given the sentences, and the words needed to complete each sentence in alphabetical order. Completions were then rated by two raters according to whether they displayed science and technology syntax (containing a nominalization, participle, infinitive, or passive) or common language syntax. It was found that computer science majors used significantly more science and technology syntactic constructions than humanities majors. Also, it was found that there was no significant differences between native and non-native writers' choice of scientific or common language constructions. Thus, background knowledge (whether one is a science or humanities major) seems to affect language structuring more than language ability. The authors assert that context shapes interlanguage use, and cast doubt on the idea that writing in a second language will result in universally simpler language.

Van Schaik, J. D. (1978). *A comparison of ESL and English composition textbooks at the university level.* Unpublished master's thesis, University of California, Los Angeles. (ERIC Document Reproduction Service No. ED 172 513).

Discusses ESL and English composition textbook content and use. Based on a poll of universities across the U.S., nine ESL and 18 English composition textbooks were identified as most commonly used in courses. A detailed content analysis was done on the texts, and questionnaires were sent to selected universities asking writing instructors to describe course goals, textbook use, student population, and instructor background. It was found that English textbooks provided instruction in a broader range of skills than ESL textbooks, and provided more instruction in composition skills (instead of exercises or blank spaces) than ESL texts. A large percentage of assignments in both types of texts consisted of sentence-level exercises. ESL texts placed a greater emphasis on personal topics, although expository writing dominated in both types of texts. Most instructors surveyed found ESL texts inappropriate for college classes, but felt that English composition texts needed modifications and supplementary materials to be used with ESL students. It was also found that English and ESL composition courses were similar in their goals.

Zamel, V. (1990). Through students' eyes: The experiences of three ESL writers. *Journal of Basic Writing*, *9*(2), 83-98.

Explores the ways in which student experience in different instructional contexts affects their attitudes towards writing. Three college-level case study students selected from a "pre-composition" course were each interviewed eight times over the course of two semesters. Their teachers and two tutors were also interviewed. Three classes were observed over the course of two semesters. The case study subjects found the pre-composition course instructor's approach the most satisfying. This instructor acted as facilitator, encouraging students to generate topics for discussion and writing, and acknowledging and extending their contributions through question and discussion. The teacher's role was interactive, collaborating with students on writing as an interested listener/reader. The philosophy of instructors for two composition courses the following semester was found to be a transmission model. They saw themselves as promoters of an academic discourse style which they felt they should transmit to students, and which students should practice and master. The case study students in these classes, however, found this approach uncomfortable and alienating since it made little allowance for individual expression and interpretation.

5.2 Response to student writing

Chandrasegaran, A. (1986). An exploratory study of EL2 students' revision and self-correction skills. *RELC Journal, 17*(2), 26-40.

Examines L2 writers' ability to recognize and correct errors as a function of the sort of feedback they receive. The first three paragraphs of essays by ten subjects were subjected to analysis for error, including verb tense or form, preposition or article usage, noun formation and spelling. The samples were also analyzed for "Problems of Reader Interpretability" (PRI) including inappropriate vocabulary idioms, anomalous style or register verbosity, ambiguity, and vagueness. Students attended a 45-minute interview with the teacher in which they followed a three-step process. Students were given unmarked essays and asked to make revisions. Second, the revised text was read aloud to the student and revisions were elicited. Last, the teacher and student went through the text together. Teachers identified each remaining error, and students were asked to supply revisions. Students successfully identified and corrected 15.3% of the errors and PRI in the first stage. They were most successful in discerning tense and verb form errors and style/register PRI, and least successful in syntax, noun form, articles, spelling, and ambiguities. 11.3% additional errors were successfully identified and corrected in the second stage. 24% more errors and PRI were successfully identified and corrected in the third stage, indicating that reader identification of errors considerably aids the process of revision. At the end of the revision process 34% of the errors and PRI were left unrecognized. The majority of these were instances of semantic inappropriateness, or word choice. Furthermore, 14.7% of the errors and PRI identified were unsuccessfully corrected. Subjects were found to be better overall at detecting errors than PRI.

Cohen, A. D., & Cavalcanti, M. C. (1990). Feedback on compositions: Teacher and student verbal reports. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 155-177). Cambridge, England: Cambridge University Press.

Compares teacher feedback and student response to feedback in L1 and L2 composition courses. Three teachers of writing, two EFL teachers—one at an EFL institute and one at a university—and one Portuguese L1 teacher, selected three students from their classes representing low, mid, and high writing proficiency. Classes varied in essay topic, in-class or at-home writing, and whether students had conferences with teachers. Teachers were asked to think aloud and provide written feedback while reading the resulting compositions, and were asked to fill out a questionnaire on their course and feedback provided. After the teacher handed compositions back, students were asked to react verbally to the feedback they received from teachers and complete a checklist about whether they understood teacher feedback and what they would do if they did not understand. All students in the three classes completed a questionnaire about the type of feedback they were receiving in class and what they would prefer to receive. Teachers varied in how well self-reports of feedback matched actual feedback given. Written feedback tended to focus on problems rather than strengths praised in verbal protocols. Teachers focused on fewer issues in written feedback than appeared in verbal protocols, suggesting that they were choosing comments according to what they perceived as students' needs. Students in the three classes tended to see teachers more as judges of their work than as interested readers. Students generally understood teacher feedback given, but were often uncertain how to fix the problem. They reported that they usually made a mental note of teachers' comments, identified points to be explained, and asked the teacher about them. Students seldom revised.

Fathman, A. K., & Whalley, E. (1990). Teacher response to student writing: Focus on form versus content. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 178-190). Cambridge, England: Cambridge University Press.

Examines the relative effectiveness of teacher feedback on form and content. Compositions and rewrites based on a pictorial stimulus were collected from students (n=72) enrolled in intermediate ESL composition courses. Students were randomly assigned to four groups. Group 1 received no feedback, Group 2 received grammar feedback only, Group 3 received content feedback only, and Group 4 received both grammar and content feedback. Grammar errors in each text were tallied, and texts were holistically rated on a 1-20 scale by two raters. Students made significant improvements only in grammatical accuracy when they received grammar feedback. However, all groups improved significantly on content between drafts, regardless of whether they received feedback on content. Most of the students who received no feedback improved grammar and content in their rewrites. While all students who received grammar feedback improved in grammar on their rewrites, not all the students who received content feedback actually improved content in rewrites, indicating that while content feedback was beneficial, it was not as effective as grammar feedback. Students increased the length of rewrites most when no feedback was given, and least when both grammar and content feedback were given. When grammar and content feedback were both given, the content of rewrites improved the same as when feedback was given on content alone, indicating that grammar feedback does not necessarily hinder content revision.

Kreeft, J., et al. (1984). *Dialogue writing: Analysis of student-teacher interactive writing in the learning of English as a second language.* (ERIC Document Reproduction Service No. ED 252 097).

Documents dialogic writing between the teacher and six students in an ESL class. The dialogic journals, plus observations and interviews with students and teachers, were collected and analyzed. Teacher responses were not found to vary significantly in intrasentential linguistic features but did vary significantly in "interactional" features such as direct repetitions of student wording and matching the topic order used by a student according to students' proficiency level. The range and frequency of language functions (e.g., requesting, reporting, complaining) used by students increased with proficiency. Questioning patterns used by the teacher were found to depart from those typical in a classroom and more closely resembled those found in NS/NNS interactions. A study of morpheme production revealed that more perceptually salient or frequent morphemes were produced first, while morphemes that are redundant, such as third person singular *-s*, were slower to appear. Individual and first language influence were also evident.

Peyton, J. K., & Seyoum, M. (1989). The effect of teacher strategies on students' interactive writing: The case of dialogue journals. *Research in the Teaching of English, 23*(3), 310-334.

Examines the written strategies of a teacher using dialogue journals in teaching limited-English-proficient students. The writing of 12 LEP students from a class of 26 was examined. Students were divided into three levels of proficiency based on teacher judgments and classroom observations. Daily journals were produced as part of class activities. A sample of 15 entries and teacher responses was taken from each of the 12 students' journals, and coded by the authors for topic initiations and responses. The teacher was found to take the role of respondent to student writing in most of the topics written about, regardless of the students' proficiency level. The teacher also made

many "personal contributions"—reporting personal and general facts and opinions, thanking, evaluating, predicting, apologizing—in which no reply was requested from students. The teacher seldom initiated topics without making a personal contribution as well. A request for a reply from the teacher resulted in a student response more frequently than when the teacher made a personal contribution without a request for reply, but not necessarily more writing. While there was individual variation, there was a tendency for writers to write more in response to a teacher topic containing a personal contribution than in response to teacher questions alone. Students seemed to write most freely when they and the teacher found a topic that they both were interested in and had something to write about. Most students wrote roughly the same amount with the same degree of syntactic complexity in topics they initiated as topics they responded to. The authors assert that the teacher's pattern of interaction in journal writing contrasts with typical patterns of spoken classroom interaction in that she acted as a supporter and sustainer of student participation, as well as a co-participant, rather than as an initiator or prompter of student response.

Robb, T., Ross, S., & Shortreed, I. (1986). Salience of feedback on error and its effect on EFL writing quality. *TESOL Quarterly, 20*(1), 83-93.

Compares the effectiveness of four different forms of teacher feedback on L2 compositions. Japanese college freshmen (n=134) at approximately the same proficiency level were divided into four classes in which only teacher feedback on compositions varied. In the first group, papers were completely corrected by instructors; in the second, codes keyed to a handout were used; in the third, texts were marked but no explanation was given for marked sections; and in the fourth, the number of errors on each line was totaled and written in the margin. Five test compositions were collected and analyzed over the course of a school year. Multivariate analysis yielded three composite factors labeled accuracy, fluency, and syntactic complexity. In general, more direct forms of feedback did not result in more error-free compositions. This finding confirmed previous studies on error correction. It was found that type of error correction had little effect on fluency, counterevidence for the claim that over-correction makes FL writers overly concerned with surface features. The authors suggest that writing practice was a more powerful factor. Complexity did not vary significantly among groups.

Sanaoui, R. (1984). The use of reformulation in teaching writing to FSL students. *Carleton Papers in Applied Language Studies, 1*, 139-146.

Reports on an experiment employing a technique based on Cohen (1982-1983) in which student compositions were rewritten or "reformulated" by the instructor. The instructor of French as a second language made alterations which typically included word choice, more complex syntax, addition of cohesive markers, evening the tone or register and adjusting the organization focus. Students were then asked to compare their own and the teacher's versions in order to note significant differences. Changes in subsequent compositions which might be attributable to the reformulation technique were noted. It was found that all students made changes in the employment of register features, complexity of syntactic structures, cohesive devices, and organization focus. Furthermore, it was found that better writers applied reformulations differently in their writing than poorer writers. They incorporated more features of the reformulations into their work and used the reformulations as examples of general principles which they applied in a variety of ways, while poorer writers tended to focus on the surface features of reformulations and were more strictly imitative.

Author Index

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